# Magone Project

## Appendix D – Scoping Report

Blue Mountain Ranger District
Malheur National Forest

# Contents



**Tables**

# Public Involvement

A 30-day public scoping period for the Magone Project began on February 13, 2015, with publication of a Notice of Intent (NOI) to prepare an environmental impact statement (EIS) in the Federal Register (see Federal Register Vol. 80, No. 30, Friday, February 13, 2015). The proposed action and detailed maps were made available on the Malheur National Forest website at http://www.fs.usda.gov/projects/malheur/landmanagement/projects.

Letters were sent to approximately 130 individuals or organizations summarizing the proposed action, and included directions to the Forest's website for more information. A public open house was held on February 24, 2015, where attendees had the opportunity learn more about the project and ask questions of the interdisciplinary team.

## Summary of Public Response

Twenty-six comments were received in the form of emails, mailed letters, and oral comments on the proposed action before the public scoping period ended. Several comments were received after the public scoping period had ended. Comments were received from both individuals and organizations. Each response letter was assigned a reference number (Table D-1).

**Table D-1. List of commenters**

| Letter reference number | Date received | Name and organization |
|---|---|---|
| SC-01 | 2/14/15 | Jean Public |
| SC-02 | 2/18/15 | Dick Artley |
| SC-03 | 2/24/15 | Judy Kerr |
| SC-04 | 2/24/15 | Bill Wilcox |
| SC-05 | 2/26/15 | Bobby Grover |
| SC-06 | 2/27/15 | Thom Routt |
| SC-07 | 2/27/15 | Annie Nielsen |
| SC-08 | 2/27/15 | Russ Comer |
| SC-09 | 3/3/15 | Brooks Smith |
| SC-10 | 3/4/15 | Cal Christensen |
| SC-11 | 3/4/15 | Doug Smith (Strawberry Striders) |
| SC-12 | 3/5/215 | Simon Daws |
| SC-13 | 3/9/15 | Debi Hueckman (Station 62) |
| SC-14 | 3/10/15 | Chris Cottingham |
| SC-15 | 3/10/15 | Elaine Eisenbraun |
| SC-16 | 3/11/15 | Kelly Johnson |
| SC-17 | 3/13/15 | Lennis Herburger/Andrea Mesple (Malheur Trail Alliance) |
| SC-18 | 3/13/15 | Wade Tait |
| SC-19 | 3/13/15 | Kiel Wood |
| SC-20 | 3/13/15 | Mark Pengelly |
| SC-21 | 3/13/15 | Ryan Torland (Oregon Department of Fish and Wildlife) |
| SC-22 | 3/13/15 | Ken & Cecelia Brooks |
| SC-23 | 3/13/15 | Irene Jerome (American Forest Resource Council) |
| SC-24 | 3/16/15 | Jason Kehrberg |

| Letter reference number | Date received | Name and organization |
|---|---|---|
| SC-25 | 3/16/15 | Teresa Kubo (U.S. Environmental Protection Agency) |
| SC-26 | 3/16/15 | Pam Hardy (Oregon Wild) |

# Specific Written Comments

The following section (Table D-2) contains specific written comments and their disposition in the draft environmental impact statement. To minimize duplication, comments addressing essentially the same topic or concern have been consolidated among the various letters. Each comment contains a citation to the comment letter(s) where the comment originated. Specific written comments are defined by 36 CFR §218.2:

> Written comments are those submitted to the responsible official or designee during a designated opportunity for public participation (§218.5(a)) provided for a proposed project. Written comments can include submission of transcriptions or other notes from oral statements or presentation. For the purposes of this rule, specific written comments should be within the scope of the proposed action, have a direct relationship to the proposed action, and must include supporting reasons for the responsible official to consider.

The responses provided here are intended to discuss all major points of view. Statements may have been summarized or paraphrased to reduce paperwork.

**Table D-2. Scoping comment identification number, source of comment, written comment, and Forest Service response**

| Comment number | Source | Comment | Forest Service response |
|---|---|---|---|
| **DEIS Chapter 1—Purpose and Need (comments 100-199)** | | | |
| 100 | SC-22, page 3; SC-24, page 2 | The purpose and need does not consider the societal values and opportunities for livestock use and grazing in the project area and should be added as an objective. | See DEIS chapter 1. Grazing was added as one of the social values and opportunities as a component of the purpose and need. While allotment management is not part of the purpose and need or proposed action for this project, grazing in existing allotments may be affected by project activities and the effects of this are analyzed in the DEIS chapter 3. |
| 101 | SC-22, page 3; SC-24, page 2 | The purpose and need states that "Where plan information was not explicit, best available science and local research were utilized in a collaborative setting with stakeholders." Permittee states that they were not informed of planning activities or included in field trips with the Blue Mountain Forest Partners. | Permittees were included in invitations to the open houses on September 24, 2014 (where the Magone interdisciplinary team gathered information for attendees about the project planning area and ideas for the proposed action) and February 24, 2015 (where attendees asked questions and provided input on the proposed action). Permittees are also included on the project's mailing list, and received an invitation to provide scoping comments on the project's proposed action.<br>Blue Mountain Forest Partners collaborative meetings and fieldtrips are open to the public, and announced by that group. |
| 102 | SC-23, page 2 | What factors during the initial analysis led to the determination that there would be "significant impacts" and that an environmental impact statement would be required for this project? | A variety of factors led to choosing to document the Magone Project in an environmental impact statement, including silviculture treatments and trail developments potentially being implemented on a substantial portion of the Nipple Butte Inventoried Roadless Area (IRA). |
| 103 | SC-23, page 2 | Isn't part of the overall purpose of the project to provide wood products to the local community? Social and economic health and resiliency in local communities are as critical to maintaining and enhancing these forest systems as restoring the forest systems themselves. | Yes, part of the purpose and need for the project is to "provide for a variety of social values and opportunities in the watershed, including…a variety of wood products (including post and pole) …and forest management employment opportunities to help maintain and improve community stability and infrastructure…." |
| 104 | SC-23, page 3 | Please include "merchantable sawtimber" to the variety of wood products provided under specific needs. Why was "post and poles" identified individually? | Merchantable sawtimber has been added to the variety of wood products in the purpose and need, as a clarification.<br>Post and poles was identified individually because the Blue Mountain Ranger District receives a lot of requests to make post and pole materials available to the public. |
| **DEIS Chapter 2—Alternatives (comments 200-299)** | | | |
| **Road Activities** | | | |
| 200 | SC-03, page 1 | Roads naturally closed and grown in, listed as closed, have an effective natural closure and have no access due to private property posting should be left closed and undisturbed (no decommission disturbance activities) as they apparently are not | Could not identify road segments in the proposed action meeting this description. |

| Comment number | Source | Comment | Forest Service response |
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| | | showing use by public vehicles or off highway vehicles. | |
| 201 | SC-03, page 1 | Roads presently displaying natural closure and grown in or “no sign of road”, not showing public use, and are proposed opening for haul maintenance should be re-evaluated and alternate haul routes adopted. If used for haul, roads should be left open. If not used for haul, roads should be decommissioned. | Currently closed roads would be opened, maintained, and used for haul because that is why they were first developed, maintained as part of the roads system, and using an existing road template would cause less resource damage than developing a new permanent or temporary road to access the same area.<br>Regarding leaving roads open that are opened for haul, roads are closed for a variety of resource concerns, the roads would be kept as ML 1 roads on the system for future management and emergency access.<br>Regarding decommissioning roads not used for haul, these roads may be needed for future management, decommissioning is proposed on roads that are causing hydrologic or other resource damage. |
| 202 | SC-03, page 1 | Roads with “breached” closures that show evidence of heavy use should have closures removed and allow unimpeded access. Breaching indicates historical use as identified in Grant County Ordinance 2013-01. | The team considered opening roads, but currently closed roads (ML 1) had been closed due to resource concerns that still exist. |
| 203 | SC-03, page 1 | Roads closed but scheduled to be opened for maintenance to accommodate haul, should be left open with maintenance improvements in place. | See response to comment # 201. |
| 204 | SC-03, page 2 | Where EA differs from road access log, the access log (which is on-the-ground conditions) evidence should be accepted. | See response to comment #202. |
| 205 | SC-09, page 2 | Roads management is not outweighed by ecological benefits over social needs. Closing roads to restore productivity and to improve watershed function will require site-specific scientific evidence of damage to guide decisions and to have public support on closures. | Roads proposed for closure or decommissioning in this project are based on site-specific surveys. |
| 206 | SC-15, page 2 | Please create a road use and maintenance plan with the county. Who will cover cost of additional grading on 18 road needed? | The county is responsible for all maintenance and cost of maintenance on county roads. |
| 207 | SC-20, page 1 | More closures in this area will cause an even greater impact to already poor roads and at times illegally maintained level of road conditions. Many of our ML 1, 2, 3, 4, and 5 level roads are currently not maintained at a legal level. A larger roads system of properly constructed roads would require less | The level of road maintenance depends on the availability of funding. Having more open roads on the road system would require more road maintenance funding.<br>Very few miles of roads are proposed for closure in Magone, and of the proposed new closures, 0.8 miles are already closed on the ground and closing |

| Comment number | Source | Comment | Forest Service response |
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| | | maintenance due to less population impact. | these roads through this process would have no impact on existing road use.<br>**Note – only ML 1, 2, and 3 roads are present in the Magone project planning area.* |
| 208 | SC-20, page 1 | Closing Road 1880-760 would cut off two other roads, 1800-195 and 1800-196, and cuts off access to four sections of land and expand an IRA. It would also cut off access to fence repair. | There is no FSR 1880-760 in the project planning area. If the commenter is referring to FSR 1800-760, the proposed closure would start after FSR 1800-195 and 1800-196 and not cut off access to these roads.<br>The option of leaving FSR 1800-760 open (as an ML 2 road) is analyzed under alternatives 3 and 4 in the DEIS.<br>If the commenter is referring to fence maintenance by permittees, this is not an access point used for that maintenance. |
| 209 | SC-20, page 1 | Closing Road 1800-162 would cut off access to five other roads (360-544, 466, 595, 612, 596), totaling as much as 5 miles of road. | There is no FSR 1800-162 in the project planning area. If the commenter is referring to FSR 3600-162, that road is already effectively closed on the ground, and closure of that road would not affect access to any other road segments (i.e., it is a spur road). |
| 210 | SC-20, page 1 | Could not confirm if closure of Road 1800-187 due to aquatics would cut off foot access to the rest of the road. | There is no FSR 1800-187 in the project planning area. If the commenter is referring to 3600-187, that is a short spur road with no access to other roads provided. Foot access would not be prohibited by any of the road closure or decommissioning proposals. |
| 211 | SC-20, page 1 | Closure of road 3618-064 would expand roadless area, cut off access to four sections of public land, and roads 3618-108 and 3618-125. Would also cut access to fence repair. | The option of leaving FSR 3618-064 open (as an ML 2 road) is analyzed under alternatives 3 and 4 in the DEIS.<br>**Note – inventoried roadless area (IRA) boundaries are identified by the 2001 Roadless Area Conservation Rule. The Magone Project would not alter the boundaries of the Nipple Butte IRA.* |
| 212 | SC-20, page 2 | Why close road 3618-083 and convert to a trail when there are already many closed trails that can be walked on. | FSR 3618-083 is already a closed road (ML 1). Under alternative 2 the road would be converted to a trail, and under alternative 3 the road would be co-designated as a trail. |
| 213 | SC-20, page 2 | Closure of road 3618-125 will cut off access to camp sites. | See response to comment #211. The option of leaving FSR 3618-125 open is analyzed under alternatives 3 and 4. |
| 214 | SC-20, page 2 | Road 3940-214 passes through three sections and should have not been closed in the first place. | Roads closed in the past were done under previous NEPA decisions. The road is impassable due to a washout at Clear Creek that closed off access to the road beyond that crossing; probably because of its location in the Nipple Butte Inventoried Roadless Area, it was not reconstructed at the time of the event. This road is among those with the greatest hydrological concerns in the project planning area. |
| 215 | SC-20, page 2 | Closure of road 3940-940 is for the purpose of expanding an IRA. | Inventoried roadless areas (IRAs) are identified by the 2001 Roadless Area Conservation Rule. The Magone Project would not alter the boundaries of the Nipple Butte IRA. It is outside the scope of this project to expand IRAs. |

| Comment number | Source | Comment | Forest Service response |
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| 216 | SC-20, page 2 | Closure of road 3947-177 is for the purpose of expanding an IRA. | See response to comment #215. |
| 217 | SC-20, page 2 | Road 3947-480 appears to be a high use road and in poor condition. This shows a need for more roads to reduce impact. | This road appears to have been a user created and maintained road, probably for the large timber sale that built the 3947-000 road (Sivliculture Atlas). This road appears to have been damaged in a high run off event that originated further upslope about 20 years ago, washed out the crossing at Clear Creek, and eroded the streambed below. |
| 218 | SC-25, page 2 | How enforcement and monitoring for administrative road closures will be implemented to ensure they are effective? | Upon implementation of closures, a CFR closure order would be issued by law enforcement and signed by the Forest Supervisor. Enforcement and monitoring is on an as needed basis and as staff is available. |
| 219 | SC-25, page 2 | How will soils be stabilized in road decommissioning? | See Appendix C – Project Design Criteria. |
| **Recreation/Magone Lake** | | | |
| 220 | SC-04, page 1 | Make boat docks match the setting; rustic wood, not aluminum. | This recommendation was included in all action alternatives, to either modify the existing boat ramp to have a more rustic appearance, or to replace with a rustic boat dock. |
| 221 | SC-04, page 1 | Put a dual launch at the boat ramp. | There is currently not enough boat use at the lake to justify a dual launch boat ramp. The existing day use boat dock would be improved, which should improve the efficiency of the existing area. |
| 223 | SC-09, page 1 | Developing two track trails is inconsistent with reducing drainage issues, or improving riparian conditions. Road decommissioning is proposed to improve hydraulic function, but then the agency proposed to add trail ERAs in the watershed, by constructing or extending trails with sensitive soils, and slopes, in an area that is currently untracked and undeveloped. Increased recreation use will reduce opportunities for solitude, and the high quality, semi primitive, dispersed recreation that currently exists. | The Forest received comments requesting both more and less new trail construction in the Magone project planning area. In response the alternatives analyze a variety of levels of new trail developments to disclose the potential effects of these developments to other resources. |
| 224 | SC-09, page 2 | Trail developments are inconsistent with landscapes restoration principles or goals that reduce effects to critical big game habitat and improve water quality conditions for fisheries. The development of more trail facilities and increasing trail densities and will not improve the health of the watershed. | See response to comment #223. |
| 225 | SC-12, page 1 | The addition of a significant amount of trails in the vicinity of Magone Lake may put undue pressure on the campground and natural resources of the lake | The lake gets heavy use during summer months; however, we have no issues so far with parking in the day use area. The campground does not receive the full use the entire season. Counters can be used to track the number of visitors |

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| | | environment if a large influx of visitors occurs as a result of the recreational possibilities afforded by these trails. Does the Forest anticipate such increases in visitor numbers? Plan for additional camping and other recreational facilities away from Magone Lake and campground. It may make sense for additional camping to be located away from the lake, next to potential new trailheads or along nearby creeks. | at Magone Lake to determine if we receive a large influx of visitors. If overcrowding and resource impacts occur, we would make adjustments that could include plans for additional camping in the area.<br>A site away from Magone Lake has been identified as a potential trailhead for single-track bicyclists and hikers. This trailhead is where a number of dispersed campsites are located. |
| 226 | SC-15, pages 1 and 2 | Magone project seems to have a heavy focus on increasing recreational use in all forms. There seems to be no calculation of increase in number of people, or of flow of people from place to place. | We measure recreational use by payouts [fees collected] and recreation visitor use numbers captured in a survey.<br>Counters can also be used to track the number of visitors to Magone Lake. If overcrowding and resource impacts occur, we would make adjustments. |
| 227 | SC-15, page 2 | Increase in recreational users may cause overcrowding at campground. The beach already is frequently over crowded; perhaps add an additional swimming area. | See response to comment #225. |
| 228 | SC-15, page 2 | Will there be campsites and fire rings designated in remote trail areas? | No campsites with fire rings are proposed in remote trail areas. |
| 229 | SC-15, page 2 | What is the maintenance plan for these trails? | A maintenance plan for the trails will model the snowmobile clubs, with a cost share and operating plan that includes trail maintenance. See Magone DEIS chapter 2. |
| 230 | SC-15, page 2 | Will trails be available for adoption? | We are not proposing trails for adoption at this time. This could be an option in the future. |
| 231 | SC-15, page 2 | On the Lake Butte Trail, define what is meant by “undesignated.” | The purpose of un-designating trails on roads is to re-route the trails off of roads where the trail shares use with vehicular traffic. The two reasons this is needed are to improve safety and to enhance the recreational experience. |
| 232 | SC-15, page 2 | Additional large wood in the lake is contrary to dispersing people around the lake to reduce crowding and increase safety. | Currently the east side of the lake is used by recreationists for picnicking and swimming mostly. Fishing opportunities are limited due to conflicts between swimmers and fisherman and in general the limited amount of quality fish habitat. Additional large wood would also increase opportunities for wildlife viewing such as waterfowl and beaver which utilize the wood as nesting sites and cover. The west side of the lake provides the recreational solace often expected by people engaging in fishing or wildlife viewing. Adding large wood to the lake will have the effect of dispersing people around the lake. |
| 233 | SC-15, page 3 | Will fish stocking levels change in association with habitat changes? Why will habitat be increased if current populations are considered in balance? | Oregon Department of Fish and Wildlife (ODFW) is in charge of stocking fish at Magone Lake. The limiting factor in the lake is spawning habitat. Plantings/increased cover could result in survival of more fish. |

| Comment number | Source | Comment | Forest Service response |
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| 234 | SC-15, page 3 | In reference to Magone Lake, has there been a day use evaluation? | The Magone Lake recreation area received national visitor use monitoring in 2009. See Magone DEIS chapter 3, Recreation Developments section and the Recreation Report for more detail. |
| 235 | SC-15, page 3 | In reference to Magone Lake, has there been a beach use evaluation? | The Magone Lake recreation area, which includes the beach area, received national visitor use monitoring in 2009. See Magone DEIS chapter 3, Recreation Developments section and the Recreation Report for more detail. |
| 236 | SC-15, page 3 | In reference to Magone Lake, how will noise be managed? | The enforcement of existing campground rules will manage noise. |
| 237 | SC-15, page 3 | Will nest boxes be provided for use by waterfowl and other birds? | The elevation of Magone Lake might limit the use of nest boxes; however, this is an option. |
| 238 | SC-15, page 3 | The project seems to be attempting to provide all amenities, to all people, in one place. Perhaps, uses could be prioritized, such as: (example only – not a suggestion) the Magone project area emphasizes hiking and Camp Lick Project area emphasizes biking – to disperse numbers of people and types of use. | With the Magone Project we are emphasizing bike trails. With the Camp Lick Project we are considering the possibility of bicycle, snowmobile, and/or horse trail opportunities. We are dispersing use across project planning areas, rather than concentrating specific types of use or activities in one area of the Forest. |
| 239 | SC-15, page 3 | To help mitigate anticipated increase in use at Magone Lake, go to the marine board to re-classify Magone Lake for electric motors only. | This is outside the scope of this project. This option can be considered if the level of use increases to the point of becoming an issue. |
| 240 | SC-15, page 3 | Consider sign-in sheets at trailheads to evaluate and manage use. | This is outside the scope of this project. This option can be considered if the level of use increases to the point of becoming an issue. |
| 241 | SC-17, page 1 | Currently, the only single track trail in the Magone area is the Nipple Butte Trail, which needs significant realignment to make it a sustainable and enjoyable trail. All other designated mountain bike trails are closed roads that have no appeal to mountain bikers in their current condition. Most of the time, old roads that have not been redesigned are inappropriate for trails because the grade is too steep to keep from washing out. Old roads usually do not lend themselves to interesting riding because they were designed for transporting timber, not cycling. Additionally, the effort required to repurpose roads as trails typically takes more man power and time than new purpose-built single-track, for a less desirable end-product. | The Forest received comments requesting both more and less new trail construction in the Magone project planning area. In response the alternatives analyze a variety of levels of new trail developments. |
| 242 | SC-17, page 2 | The Magone Project can prevent conflicts between mountain bikers, equestrian riders, and motorized | We are not designing the hiker/biker trails for horse use. Horse trails are typically wider; however, horse riders will not be restricted from using these |

| Comment number | Source | Comment | Forest Service response |
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| | | users by allowing those trails designated as mountain bike trails be purpose built to mountain bike specifications and closed to equestrian and motorized use. Equestrian and motorized users are important groups that warrant their own purpose built trail networks specifically designated for their use. | trails. |
| 243 | SC-21, page 1 | The Magone Project has a potential to improve elk forage and maintain security on the forest. However, one concern is the proposed trail system in the Nipple Butte IRA. Currently, this is the only area that does not have a developed system of roads and trails in the Northside Wildlife Management Unit. Due to its primitive nature, it is one of the few areas that hold elk throughout the summer. The proposed construction of new trails could adversely impact this area and cause changes to elk distribution, possible to private lands. | In response to this comment and others we are reducing the number of proposed bike trails in the Nipple Butte IRA and the wildlife emphasis area (WEA), and focusing trails on the north side of the IRA (outside of the WEA) and in the eastern part of the project planning area (outside of the IRA). We are also analyzing the effects of different amounts of trail developments under the three action alternatives.<br>Also see response to comment #223. |
| 244 | SC-21, page 1 | Recommend reducing the amount of new trail proposed in the Nipple Butte IRA to protect elk security habitat. Limiting the number of trails to one or two would be more acceptable and cause less elk displacement. | See response to comment #243. |
| 245 | SC-22, page 6 | The proposal to develop trails in the Nipple Butte IRA is an incompatible use with the existing uses of the area. Permittees have worked for years to improve the distribution of cattle across the landscape and minimize riparian use, but this disturbance would drive them off the uplands and create areas of congregation from harassment by hikers and bicyclists. Wildlife will be disturbed in critical times when they need to conserve energy (winter and calving times). There are many places in the forest to improve existing closed roads or trails to accommodate this form of recreation but not in an IRA, a Designated Wildlife Area, or where incompatible uses like grazing is already authorized. | See response to comments #223 and 243. |
| 246 | SC-24, page 4 | The trail enhancements proposed within the Tinker Creek Pasture will have a large effect on a permitted grazing operation. The trail that is proposed to the south of Magone Lake on the ridge between Tinker | Regarding the proposed enhancement of the existing trail within the Tinker Creek pasture, we developed additional alternatives which include moving the trail up onto the hillside away from a livestock water source. In addition, the action alternatives have a range of new trail developments that will be analyzed |

| Comment number | Source | Comment | Forest Service response |
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| | | Creek and Lake Creek has the greatest potential to significantly restrict the distribution of cattle and the permittee's ability to fully utilize the pasture. Trails should be positioned to avoid existing livestock water sources and supplement areas, and/or the Forest Service provide alternative sites and/or improvements to mitigate this substantial impact to grazing operations. | and the effects to resources disclosed (including to range management). |
| 247 | SC-24, page 5 | Any signage regarding the interpretation of the area should include information regarding timber production and grazing. | This recommendation has been incorporated into alternatives 2 and 3, which include the placement of new interpretive signs in the project planning area. |
| **Silviculture Treatments** | | | |
| 250 | SC-09, page 2 | Should the agency remove dense and decadent stands, which are currently providing limited critical refuge structures and biological connectivity throughout the Forest? | We are designating areas of dedicated old growth and wildlife connectivity corridors, which provide dense and decadent stands. We are not treating dense and decadent stands in the northwest portion of the project planning area. The southern half of the project planning area is predominantly in the Warm Dry plant association group, and not as dense and decadent. |
| 251 | SC-20, page 2 | The proposal does not call for enough timber to be harvested. Does taking only young wood products and leaving older trees to die meet the purpose of sustained yield? | The Malheur Forest Plan requires leaving some older trees, and this project is designed to meet Malheur Forest Plan standards. However, alternative 3 includes more timber harvest than the proposed action (alternative 2) in response to this and other comments. |
| 252 | SC-22, page 4; SC-24, page 3 | Would like the Forest Service to better reflect its multiple use management mandates and balance its consideration for providing goods and resources to the surrounding communities by broadening the proposed silviculture treatments to include more commercial harvest. | Many of the areas not identified for treatment are not harvestable. They are on steeper ground that ground-based equipment cannot access, or in the IRA, the majority of which also cannot be accessed (except possibly by helicopter).<br>Alternative 3 was developed to include more silviculture treatments, including more commercial harvest. |
| 253 | SC-22, page 5; SC-24, page 4 | With regard to treatments within the IRA, consider the use of modern logging equipment (e.g., forwarders) to minimize disturbance while still allowing for harvest in these areas. | Regarding the use of forwarders in the IRA, they have limitations when operating on steeper slopes. A forwarder might have to cross steep ground to access harvest units. Most timbered areas in the IRA have slopes of 35 to 60 percent.<br>This project does not meet any of the conditions under which a road can be constructed in an IRA (see the 2001 Roadless Area Conservation Rule). Alternatives 2 and 3 include silvicultural treatments in the IRA that could be accomplished using existing road access into the IRA and treatments that do not require road access. |
| 254 | SC-23, page 3 | Will there be projects that are implemented specifically to enhance huckleberries? | There is not a lot of the Cool Moist plant association group (PAG) in this planning area (Cool Moist is typical plant association group for huckleberries). |

| Comment number | Source | Comment | Forest Service response |
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| 255 | SC-23, page 3 | In areas where elk winter range is thinned, are openings with a maximum size of one acre large enough? Would occasional scattered large opening, with irregular shapes be more beneficial in promoting the growth of shrubs and grasses? | The Malheur Forest Plan states that "when applying uneven-aged management, the size of created openings are to be a maximum of two acres in size. Exceptions will be based on site-specific prescriptions which are responsive to integrated land management objectives" (USDA Forest Service 1990, page IV-72, Standard 21). |
| 256 | SC-25, page 2 | How will the proposed activities impact the retention of large snags, downed logs, and large wood in streams? | The Magone Project would follow Malheur Forest Plan standards and guidelines.<br>Large wood would be placed in streams as part of the Aquatic Restoration Decision and thus large wood in streams and downed wood in riparian areas would increase as part of that project. Large snags would be retained unless a hazard, additionally large trees providing primary shade would be retained as directed in the Aquatic Restoration Decision. Trees growing in the riparian area would likely grow faster due to release of competition from adjacent trees in close proximity, conifer stocking levels would be reduced and the appropriate vegetation such as riparian hardwoods would increase, elevated water tables as a result of restoration activities may also elevate water tables, decreasing dominance of lodgepole pine trees. |
| 257 | SC-25, page 2 | How have thinning activities been designed to minimize impacts to fragile soils, steep slopes, riparian areas, watershed with sedimentation problems, and fish population strongholds? | Impacts to these resources would be avoided or reduced with project design criteria, please see Appendix C – Project Design Criteria.<br>The Soils Report describes the soils in areas proposed for thinning; the effects of thinning, including the application of project design criteria (PDCs), on these soils is discussed in the DEIS Soils section and the Soils Report. The fragile non-forested soils would be excluded from units or avoided under the PDCs. Thinning and removal of trees with commercial value is not proposed for riparian areas; thinning of small trees (11 inches in diameter) and handpiling may occur in riparian areas; these activities are not expected to expose mineral soil as described in the Watershed Report. Application of PACFISH standard width Riparian Habitat Conservation Areas as filter strips provide control of sediment in addition to that provided by PDCs (Watershed Best Management Practices) applied within activity units. |
| 258 | SC-25, page 2 | How do the proposed harvest and thinning prescriptions reflect the consideration of natural disturbance and stand development processes? | Please see the silviculture sections in the Magone DEIS. |
| 259 | SC-26, page 7 | Use the historic range of variability as a guide, but take into account historic abundance of large trees and snags, the scale and distribution of patches of dense forest, roadless areas, etc. Also consider the natural range of variability, which is the historic range of variability as modified by future climate change and fire suppression. | This recommendation is consistent with the project and its purpose and need. |

| Comment number | Source | Comment | Forest Service response |
|---|---|---|---|
| 260 | SC-26, page 8 | Manage forests for complex structure and multiple age classes. This approach would retain all existing large and old trees, retain untreated patches at many scales, manipulate basal area as guided by PAGs, and generally tolerate more diversity in the stand. | This recommendation is consistent with the project and its purpose and need. |
| 261 | SC-26, page 9 | Provide clear and detailed descriptions of silvicultural prescriptions and marking guides in the NEPA document. | The silvicultural prescriptions and marking guides are not included in the NEPA document. These are considered companion documents to the Silvicultural Report and the NEPA analysis. |
| 262 | SC-26, page 9-10 | Use diameter limits as a management tool because it provides an easily measured means to prevent economic values from trumping ecological values. Use smaller limits for fire tolerant species and bigger limits for fire intolerant species. For rare cases when diameter limits are inappropriate, provide clear and objective criteria. | This suggestion is consistent with the project. |
| 263 | SC-26, page 10 | Prioritize treatment of dense young stands that are most “plastic” and amenable to restoration. | This recommendation is consistent with the project. Older stands, particularly in dedicated old growth, replacement old growth, and wildlife corridors would not be treated except in a few cases to enhance the old growth characteristics of the stand. Many of the stands in the Magone project planning area are younger, particularly in the 32 percent of the project planning area (51 percent of the project planning area that is located outside of the Nipple Butte IRA) that is formerly privately owned and has been harvested in the past. |
| 264 | SC-26, page 10-12 | Develop project to have an optimal mix of treated and untreated patches within and between stands. This should factor in big game cover and forage requirements, and how many green trees are needed to recruit sufficient snags and dead wood over time (both short and long-term) to achieve 50-80% DecAID tolerance levels.<br>Use skips and gaps, with gaps smaller and skips larger.<br>Instead of an 80/20 mix of treated/untreated areas, consider a variety of combinations such as 60/40, 50/50, 40/60, and 20/80.<br>Consider allocating areas inaccessible by road to the untreated portion of the mix. | This suggestion is consistent with the action alternatives when looking at the treated/untreated mix within different treatments and different spatial scales. The between stand mix of treated/untreated varies greatly across the project planning area and between the action alternatives analyzed in the Magone DEIS. There are many large blocks that are to be treated extensively. There are also several blocks where no treatment would occur due to wildlife habitat concerns and special management areas. Skips (leave patches) and gaps (openings) would be utilized at the most appropriate spatial scale given the historical fire regime. See DEIS chapter 3 regarding effects to big game. |
| 265 | SC-26, page 13 | Retain wildlife trees such as hollows, forked tops, broken tops, leaning trees, etc. | Snags would not be targeted for removal unless they are identified as a safety hazard; hazard snags felled will be left on site and stumped as high as possible to alleviate the safety hazard. Many snags would be retained under this project; |

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| | | | however, it is not possible to retain every tree meeting this description. Many of the other trees with desirable traits for wildlife such as those mentioned would be retained through leave patches, connectivity corridors, and individual leave tree selection during layout and specific project design criteria. |
| 266 | SC-26, page 13 | Avoid impacts to raptor nests and enhance habitat for diverse prey species. Train marking and cutting crews to look up and avoid cutting trees with nests and/or trees with defects. | See DEIS Appendix C – Project Design Criteria for PDCs pertaining to raptors. In addition, habitats meeting this description would not be treated in many of the dedicated old growth areas, replacement old growth areas, wildlife corridors, and other leave patches. |
| 267 | SC-26, page 13 | Treatments in forests with mixed-severity fire regimes should ensure those areas are outside of the HRV, will not remove scarce habitat for focal species that depend on dense forests. These treatments should be more patchy and leave behind more structure, snags, and large dead wood. | This recommendation is consistent with the project and its purpose and need. |
| 268 | SC-26, page 15 | View native insects and disease in an ecological context and part of the natural processes for our forests. They should be viewed as solutions, rather than problems. | The conditions in the Magone project planning area are outside of what is natural due to fire exclusion. In some areas there are pockets of older ponderosa pine mortality. These pockets of mortality will begin showing up when stand density increases and trees reach a vigor threshold that attracts beetles to the weakened, low-vigor trees growing in the stand. Scott, D.W. and C.L. Schmitt. 2009. Insect and Disease review of the Magone Fuels Reduction Project. Letter dated November 24, 2009 on file at BMFIDSC in, La Grande, OR. Many of these stands are now dominated by white fir and Douglas-fir, showing evidence of a large departure from historic stand composition and density, leaving the large pines more susceptible to insect attack. Allowing the firs to encroach in these historically fire-maintained, open seral dominated stands, adding stress to the larger trees is counterproductive to encouraging a more resilient older ponderosa pine stand. |
| 269 | SC-26, page 15 | Develop restoration treatments appropriate to each forest type or PAG. | This recommendation is consistent with the project and its purpose and need. |
| 270 | SC-26, page 16 | Forests most altered by fire exclusion and other human activities should be the top priority for restoration treatments.<br>• Areas within dry forest types that still contain old growth trees should be prioritized<br>• Both dry ponderosa pine and dry mixed conifer forest types are in need of restorations<br>Ecological restoration in roadless and previously unlogged areas should focus on removal of small fuels and reintroduction of fire. | This recommendation is consistent with the project and its purpose and need.<br>Much of project planning area proposed for treatment is formerly privately owned lands (see Appendix B – Maps, Map 19), which were harvested in the past and are outside of natural conditions.<br>Treatments in roadless areas would focus on treating fuels and reintroducing fire, and improving wildlife habitat. |

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| 271 | SC-26, page 16-17 | For thinning in Old Growth (OG) stands:<br>• Retain all OG trees of all species.<br>• Retain historic mix of species.<br>• Retain all snags and down logs, with safety exceptions.<br>• Retain 15 to 20% in wildlife leave patches from ¼ to 5 acres.<br>• In small trees thin in variable density 60-80 square feet basal area, retaining the largest trees that will become the next generation of old growth. Larger trees carry higher basal areas of 100-140+.<br>• Thin leaving clumps of 2 to 10 trees with 3 to 4 clumps per acre.<br>Doughnut thin around old growth trees, but if available retain 1 to 2 good sized trees in the doughnut to become replacement old growth | This suggestion is consistent with the project.<br>One of the current dedicated old growth stands is not actual old growth habitat (DOG 03115PW), and this project proposes to make this a replacement old growth area and prescribe silvicultural treatments to move the stand toward old growth conditions. An alternate dedicated old growth area with existing old growth habitat would be designated in its place. See DEIS chapter 3, Evaluation of Forest Plan Amendments section. |
| 272 | SC-26, page 17 | Target treatments to protect specific groves of fire-resistant, old-growth trees that are threatened by ingrowth of small fuels; while leaving all medium and large trees that show old-growth characteristics. | This recommendation is consistent with the project. Large, old trees would not be removed. |
| 273 | SC-26, page 17 | Thin from below, retaining the largest trees, or use “free thinning” with a diameter cap so that some trees of all size classes are retained. Retain all large trees and most medium sized trees so they can recruit into the larger classes of trees and snags. | This recommendation is consistent with the project. |
| 274 | SC-26, page 17 | Retain all trees with old-growth characteristics even if they are less the 21” DBH (e.g., using the Van Pelt guidelines). | This recommendation is consistent with the project. |
| 275 | SC-26, page 18 | Prioritize treating stands that have already been logged. Only treat unlogged forests where there is clear and convincing evidence that fire exclusion has truly changed forest structure from it HRV. | This recommendation is consistent with the project. |
| **Fuels Treatments** | | | |
| 276 | SC-09, page 2 | What is the urgency to treat this roadless landscape since it is not within proximity of a community needing protection? Do the proposed fuels treatments support rationale for treatments in the | Treatments within an inventoried roadless area (IRA) can only occur if it will maintain or improve one or more of the roadless characteristics. Fuels and other treatments proposed within the IRA cannot and are not being proposed |

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| | | Roadless Area, rather than developing fire protection outside the IRA? | for fire protection outside of the IRA.<br>Over 100 years of fire suppression within the Nipple Butte IRA have led to unnatural conditions and fuel loadings. Treatments are being proposed to re-introduce fire onto this landscape as a natural process, and to improve wildlife habitat. |
| 277 | SC-09, page 2 | Do the proposed fuels treatments support rational for treatments in the IRA rather than developing fire protection outside the IRA? | See response to comment #276. The Magone DEIS analyzes a range of level of activities proposed in the Nipple Butte IRA, including an alternative with no treatments. |
| 278 | SC-22, page 6 | The proposal does not appear to create enough of a fuel break along the county road and fuel breaks need to be established along the southern forest boundary to protect the East Fork of Beech Creek. | The proposal does include fuel breaks along the majority of County Road 32 and along the southern boundary of the project planning area. County Road 18 does not have as much proposed because much of this area was previously authorized for treatment under the County Road 18 Healthy Forest Restoration Act Project. Areas not proposed for treatment in these areas are dedicated old growth areas or are open scabland areas. |
| 279 | SC-22, page 6; SC-24, page 4 | Create secondary fuel break along existing range fencing to provide additional fuel breaks and to protect range fence structures. | Fence right of ways (6 feet either side of fence), trails, other developments and access to them would be cleared of slash produced by logging or post-sale activities. See Appendix C – Project Design Criteria. |
| 280 | SC-25. Page 2 | How will the proposed action and subsequent actions decrease the risk of undesirable wildfire in the short, medium, and long term. | Please see DEIS chapter 3, Fire and Fuels section. |
| 281 | SC-26, page 19 | If using techniques such as whole tree yarding or yarding with tops attached to control fuels, the agency should top a portion of the trees and leave the greens in the forest in order to retain nutrients on site. | This suggestion is consistent with the project. |
| 282 | SC-26, page 19 | Consider bifurcating the landscape along the area defining the “structure ignition zone” within 200 feet of homes and built structures. Inside the structure ignition zone, vegetation treatments can focus on modifying fuels to protect infrastructure. Outside the structure ignition zone, treatments should focus on ecological restoration, where fuel hazard is but one consideration. | This suggestion is consistent with the proposed action. Vegetation treatments are designed to shift the project planning area towards a more historical species composition given the historical fire regime, as well as protecting infrastructure. |
| **Implementation** | | | |
| 283 | SC-12, page 1 | A landscape architect should oversee trail construction and other work in the Magone Lake area to ensure scenic quality and integrity. | The Magone project proposals are being reviewed for scenic quality and integrity, see Magone DEIS chapter 3, Visuals section and Visuals Report. |

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| **Miscellaneous** | | | |
| 284 | SC-09, page 1 | Decisions regarding development of trails and prescribed burns have the potential to take away from the primitive character of an area recommended for Wilderness (Nipple Butte IRA). These plans also conflict with the current Forest Plan goals for maintaining high water quality and wildlife habitat. A forest plan amendment would be required to change Management Area 21 Forest Plan Standard. | See Magone DEIS chapter 3, Impacts to the Nipple Butte Inventoried Roadless Area (IRA) section. |
| 285 | SC-09, page 1 | Regarding the IRA, this area serves as a reference landscape that is relatively undisturbed. Current management objectives in this area focuses on maintaining high quality big game habitat capability for mule deer and elk with an effectiveness index goal of HEI 0.7 value. High cover density, low trail and road densities, meet the hiding cover requirements. The current Forest Plan calls for restricting development to protect habitat and minimize harassment. | In wildlife emphasis areas (not IRAs) the forest plan standard calls for restricting development to protect habitat and minimize harassment. See Magone DEIS Chapter 3, Wildlife section and Wildlife Report. |
| 286 | SC-09, page 1 | How does this proposal follow the Roadless Rule on “roadless intervention” beyond life and property? | We believe the commenter is referring to §294.12 which states that roads may not be constructed or reconstructed except in a few circumstances, which include the need to “protect public health and safety in cases of an imminent threat of flood, fire, or other catastrophic event that, without intervention, would cause the loss of life or property.” The Magone Project does not propose to construct or reconstruct any roads in the Nipple Butte IRA.<br>The Magone Project does include alternatives which include timber cutting, sale, or removal in the Nipple Butte IRA, which is permitted under certain limited circumstances. See Magone DEIS for more information. |
| 287 | SC-17, page 1 | Establish seasonal trail closures due to deer and elk migration in the IRA. | There is currently no plan to have seasonal trail closures within the Nipple Butte IRA. |
| 288 | SC-17, page 1 | The Final Rule for management of IRAs identifies mountain biking as an acceptable use in the “Roadless Area Values and Characteristics” section. | Correct. |
| 289 | SC-22, page 2, 7; SC-24, page 4 | There is an invasion of knapweed along the East Fork of Beech Creek. Weed treatments should be included in the proposal in conjunction with the Noxious Weed EIS. | This is outside the scope of the Magone Project. Please refer to the Record of Decision for the Malheur National Forest Site-Specific Invasive Plants Treatment Project. |
| 290 | SC-22, | Request that all underburning operations be | Burning operations would be coordinated with permittees in advance, including |

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| | page 5; SC-24, page 4 | coordinated with permittees well in advance of their application. Burning should be limited in size and frequency to prevent disruption of annual grazing capacity and season of use. In addition, range improvements should be protected during burning. | scheduling of burning activities in grazing units. Range improvements would be protected during burning, and if these structural improvements are damaged during project operations they would be repaired to Forest Service standards prior to livestock scheduled use by the party responsible for causing the damage. See Appendix C – Project Design Criteria. |
| 291 | SC-22, page 5; SC-24, page 4 | Do not allow for the use of natural ignitions to meet management objectives because it does not allow for coordination with permittees. | To the greatest extent possible prescribed fire and natural ignition would be coordinated with the permittees. Effort would be made to minimize negative effects to the grazing rotation, numbers, and season of use |
| 292 | SC-22, page 6; SC-24, page 4 | Forest Service needs to coordinate better with grazing permittees regarding trail construction due to potential impacts to cattle operations, including distribution away from riparian areas. | To the greatest extent possible, trail construction would be coordinated with permittees to minimize impacts to cattle operations. |
| 293 | SC-25, page 2; SC-26, page 19 | Please describe measures that will be used to reduce the likelihood of introduction and spread of invasive species. | See Appendix C – Project Design Criteria. |
| 294 | SC-25, page 3 | With regard to Forest Plan Amendment allow removal of trees greater than 21 inches, identify those areas where there is ecological benefit to removing young trees over 21 inches. Take into account geographic context, tree size, tree age, species, spatial distribution, abundance, HRV, and forest health. | A forest plan amendment to allow removal of trees greater than 21 inches is not proposed under any of the alternatives in the Magone Project. |
| 295 | SC-26, page 7 | Do not amend Eastside Screens standard #6(d)(3) to ensure that wildlife are not isolated in small pockets. The proposal appears to be contrary to the purpose and need of the project. Identify needed corridors and ensure that key habitat strongholds are connected to other strongholds. | The interdisciplinary team working on the Magone Project took a hard look at designating optimal connectivity corridors beyond what would be required by Eastside Screens standards. All alternatives ensure that key habitats are adequately connected and that the intent of standard #6(d)(3) of the Eastside Screens is met. See DEIS chapter 3, Wildlife section and Wildlife Report. |
| 296 | SC-26, page 7-8 | Focus on restoring ecological processes and forest ecosystem health rather than focusing on restoring forest structure and tree health | This recommendation is consistent with the project and its purpose and need. |
| 297 | SC-26, page 18 | Protect soils by avoiding road construction, minimizing ground-based logging, and avoiding numerous large burn piles. | This recommendation is consistent with the project; see Appendix C – Project Design Criteria. |
| 298 | SC-26, page 19 | Do not allow log hauling during the wet season. Over-snow and during the dry season can have fewer impacts. | See Appendix C – Project Design Criteria and the environmental effects described in the Magone DEIS chapter 3. |

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| **DEIS Chapter 3—Affected Environment and Environmental Consequences (comments 300-399)** | | | |
| 300 | SC-02, page 5 | Analysis should include a local market analysis that includes: names of mills that need forest products; current mill volume; effect to community if no timber is made available; other industries that would be positively or negatively impacted. | The viability of harvest is dependent upon the market prices for raw wood fiber and the costs of harvest that are identified in the Economics Report, methodology and assumptions section. Market prices are determined by the supply and demand relationships that exist for wood fiber on a global scale. Local sawmills that could bid on the sawtimber from this project are located in Prairie City and John Day. In addition to local sawmills, three to four large logging contractors usually bid on local timber sales, and if successful, could sell the sawtimber to the same local sawmills. Mills that are outside Grant and Harney counties and may benefit from the timber on this project include La Grande and Pilot Rock. This could have an impact on the economy of these communities as well. |
| 301 | SC-09, page 2 | What is the evolutionary history of large fire in the Nipple Butte IRA and what is the reference conditions used for this landscape? | It is unclear what the commenter means by “reference” conditions. We have been recording fire starts for the past 80 years. Many fire starts occur in the IRA and we suppress those fires for the most part. See Magone DEIS chapter 3, Fire, Fuels, and Air Quality section and Fire, Fuels, and Air Quality Report. |
| 302 | SC-09, page 2 | Is large fire frequency in this area within the range of variability and should it be expected to have large fire events during drought conditions? | Fire conditions (frequency and risk) are discussed in the analysis in the DEIS chapter 3, Fire, Fuels, and Air Quality section and the Fire Fuels, and Air Quality Report. There is high fire risk with the amount of starts we get from lightning strikes in this area. |
| 303 | SC-15, page 2 | What is the anticipated long-term trend and progression of increased recreation? Can this be modeled? What plans for in place for 10 years from now, 20 years, etc. relative to increased people, usage, and impact? | See Magone DEIS chapter 3, Recreation section and Recreation Report. |
| 304 | SC-15, page 2 | What is the anticipated interface between cattle, bikers, and hikers? Increased traffic on single width trails should be evaluated and mitigated. | See Magone DEIS chapter 3, Recreation and Range sections, Recreation Report, and Range Report. |
| 305 | SC-21, page 1 | Research conducted in the Starkey Experimental Forest demonstrates that human disturbance from hikers, cyclists, and horseback riders can cause a flight response from elk up to 1,000 meters away. A similar response could result from new trails in the Nipple Butte IRA.<br>Suggest using the Blue Mountain Elk model to analyze the effects of the proposed trails on elk. | Research conducted in the Starkey Experimental Forest regarding disturbance from hikers, cyclists, motorists, and horseback riders is consistent with the analysis of the proposed alternatives, particularly regarding trail and road densities.<br>The Blue Mountain elk model is a draft model. We have data from the model but there are no high-rated areas on our forest. The model ratings are 1 to 6, with 6 being the highest. The highest rating is a 3 on our forest and the Magone project planning area is a 3. The Blue Mountain elk model will be referenced in the wildlife resource analysis. |
| 306 | SC-25, | Please address how roads in the project area currently impact resources and how project related | See the effects discussions in the Magone DEIS, chapter 3. |

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| | page 2 | road work and use would impact sediment in streams, subsurface flow of water, habitat fragmentation, wildlife disturbance, noxious weeks, and fire danger from recreational activities. | |
| 307 | SC-25, page 2 | Disclose which waterbodies may be impacted by the project, the nature of the potential impacts, and specific pollutants likely to impact those waters. | See the Magone DEIS, chapter 3, Watershed section. |
| 308 | SC-25, page 2 | Disclose general locations of rare or special status plants and how these sites would be managed. | See the Magone DEIS, chapter 3, Botanical Resources section and Appendix C – Project Design Criteria. |
| 309 | SC-25, page 2 | Disclose whether the proposal would affect tribal natural and/or cultural resources and how the forest plans to address tribal concerns. | The project would have generally positive effects to tribal natural and cultural resources and we will address any tribal concerns through consultation with the appropriate American Indian tribes under the terms of the Memorandums of Agreement we have established with those individual tribes. |
| 310 | SC-25, page 2 | Analyze the potential effects of the project on climate change, as indicated by its estimated greenhouse gas emissions, and the implication of climate change for the environmental effects of the project. | See Magone DEIS, chapter 3, Climate Change section. |
| 311 | SC-26, page 6 | In regards to the proposed bike trails in the Nipple Butte IRA; please ensure that you thoroughly investigate the latest science on the impacts of mountain bikes to wildlife in roadless areas. | An effort will be made to find and consider any relevant science on the impacts of mountain bikes to wildlife in roadless areas. See Magone DEIS, chapter 3, Wildlife section. |
| 312 | SC-26, page 7 | Disclose the “trade-offs” related to logging to display net ecological effects. | See the effects discussions in the Magone DEIS, chapter 3. |
| 313 | SC-26, page 12 | Analyze effects to LOS species, especially those associated with large trees and large dead wood using DecAID tolerance levels.<br>Conduct a stand simulation model to fully disclose the effects to dead wood, especially long-term recruitment of large snags >20” DBH. | The effects to late and old successional (LOS) species, cavity nesters, and other species dependent on dead wood are analyzed with the help from the DecAID Dead Wood advisory tool. Tolerance levels for a sample of those species are displayed in figures in the Primary Cavity Excavators section of the Wildlife Report. See also Magone DEIS, chapter 3, Wildlife section. |
| 314 | SC-26, page 13 | Disclose habitat needs of primary cavity excavators over the long-term and ensure there is a long term supply of snags and dead wood. | The effects to habitat for primary cavity excavators and the expected trend in dead wood distribution are analyzed in the DEIS, chapter 3, Wildlife section. |
| 315 | SC-26, page 14-15 | Disclose effects of forest health thinning, and the scientific uncertainty around fuels reduction, its effectiveness at reducing fire risk, the need for follow up treatments, and the cumulative effects of landscape-scale treatments. | See DEIS chapter 3, Fire, Fuels, and Air Quality and Silviculture sections |

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| 316 | SC-26, page 20 | Disclose the carbon cost associated with thinning. | See DEIS, chapter 3, Climate Change section. |
| 317 | SC-26, page 20 | Disclose impacts of biomass treatments and transporting biomass in chip vans? What are the direct, indirect, and cumulative impacts on soil, water, wildlife, and weeds? | If biomass is removed from commercially thinned units it would be removed with the logging system used for commercial removal (cut-to-length, whole tree, and skyline) at the time of commercial removal. This may require a few extra passes with equipment, but biomass is generally small and can be "bundled" in turn. If biomass is removed from units not commercially thinned it may be removed with a small forwarder, skidder, or a tracked UTV machine.<br>Roads would not be changed to accommodate chip vans; so would only transport in chip vans on roads that can handle that traffic.<br>See the effects discussions in the Magone DEIS, chapter 3.<br>See Appendix C – Project Design Criteria for PDCs that would minimize spread of weeds. |
| 318 | SC-26, page 20 | Disclose the scale and pace of restoration needed to maintain viable populations of native wildlife and what actions are necessary on federal lands to compensate for what is occurring on non-federal lands. | The effects of actions proposed in the Magone Project as well as other past, present, and reasonably foreseeable future actions in the areas are analyzed in the DEIS chapter 3. |
| **Clarifications/Errata (400-499)** | | | |
| 400 | SC-03, page 2 | Some closed roads found within the planning area are not listed in road logs or CFR closures. | We are not able to respond to this comment without specific road numbers and/or locations of the closed roads. |
| 401 | SC-03, page 2 | What is the continuing authority of a CFR closure when the Forest Service has allowed ingress and egress under CFR Title 36, Part 261, Subpart B, 261.50(e)(1), when such permitted activities such as logging alter the reason for closure (i.e., prohibited use for wildlife, etc.). | 36 CFR 261.50(e) states that:<br>*An order may exempt any of the following persons from any of the prohibitions contained in the order:*<br>*(1) Persons with a permit specifically authorizing the otherwise prohibited act or omission.*<br>*(2) Owners or lessees of land in the area;*<br>*(3) Residents in an area;*<br>*(4) Any Federal, State, or local officer, or member of an organized rescue or fire fighting force in the performance of an official duty; and*<br>*(5) Persons engaged in business, trade, or occupation in the area.*<br>*(6) Any other person meeting exemption requirements specified in the order."*<br>The CFR closure would continue to restrict use of the area. |
| 402 | SC-09, page 2 | What are the landscape attributes of the Nipple Butte IRA that nominated this area for wilderness inclusion and how will these attributes be altered? Are IRAs | The U.S. Congress has reserved the authority to make final decisions on wilderness designation, which it has not done for the Nipple Butte IRA.<br>The Forest Service evaluates and recommends lands that may be suitable for |

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| | | protected areas suitable for Wilderness designation, until a LMP revision analysis and evaluation is completed? | inclusion in the National Wilderness Preservation System during forest plan development or revision. The Nipple Butte IRA was not recommended as wilderness in the 1990 Malheur Forest Plan, and it is not recommended for wilderness designation in the draft 2014 Blue Mountains National Forests Proposed Revised Land Management Plan.<br>See the Magone DEIS chapter 3, Inventoried Roadless Areas and Other Undeveloped Lands sections for an analysis of impacts to the roadless area characteristics and undeveloped areas. |
| 403 | SC-09, page 2 | The draft EIS must incorporate or attempt to resolve conflict between local plans, ordinances, or laws. | We will review and attempt to resolve any conflicts with State and local plans, ordinances, and laws. |
| 404 | SC-10, page 1 | Is it possible to allow some small contracts out of these projects instead of putting all contract work under the stewardship agreement? | Currently the Malheur National Forest is in the third year of the 10 Year Stewardship Contract. The stewardship contract was designed to help keep work and forest products in our local economy. Approximately 80 percent of the Forest's fiscal year target is to be included in the stewardship contract and the remaining 20 percent is to be included in regular timber sale contracts. This ensures that work and Forest products will not only be available to the local economy but will also be available to potential outside bidders or mills that may be interested. Therefore the Magone Project could be included in either stewardship contracts or regular timber sale contracts. |
| 405 | SC-10, page 1 | Can small sales be opened under this project for juniper, lodgepole, post & pole, etc. | Post and poles (lodgepole) will be analyzed for and will include different diameters. There is not a large amount of juniper available in the commercial units, but there is in the non-commercial units, which could be made available. |
| 406 | SC-15, page 1 | The proposed action mentions "improve aspen stands" and then it is not mentioned again in the scoping document. Set a quantitative goal for aspen expansion. | See Magone DEIS chapter 2 for the details on proposed conifer reduction in aspen stands. |
| 407 | SC-15, page 3 | Do you have a social scientist on this planning team? | The members of the interdisciplinary team can be found in the Magone DEIS chapter 4. |
| 408 | SC-20, pages 2-3 | There has not been a sustained yield of timber production on the forest which has led to high unemployment and low income. This does not comply with the scope of Executive Order No. 12898. | Executive Order 12898 directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.<br>The Magone DEIS includes an analysis and disclosure of human health or environmental effects on minority or low-income populations |
| 409 | SC-22, pages 2-3 | With regard to the John Day Allotment, the most significant resource problem is the overstocked condition of timber and expansion of juniper, not a lack of woody debris or beaver. | Please see alternatives 2 and 3, which include non-commercial thinning (including juniper removal) in the Nipple Butte IRA.<br>The addition of large woody debris to streams is not proposed in the Magone Project, but could be implemented in the area under the Aquatic Restoration |

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| | | | Decision. |
| 410 | SC-22, pages 3-4 | Concern was expressed with regard to placement of woody debris without adequate monitoring of existing project benefit, when compared to prior log weir treatments that were installed across the forest and later found to be ineffective. | The addition of large woody debris to streams is not proposed in the Magone Project, but could be implemented under the Aquatic Restoration Decision. |
| 411 | SC-22, page 4 | The proposed riparian hardwood seed source fencing in the Clear Creek MSRA is not feasible due to the lack of water during the summer months. This MSRA should be removed due to its dryness during summer months. | The stream currently lacks water in some locations due to degraded stream and fish habitat conditions. The current water table is the result of an incised stream channel and lack of floodplain connectivity for water storage. There are remnant alder, cottonwood, and willow within the riparian area of Clear Creek indicating the water table was higher in the past. |
| 412 | SC-22, page 5 | Prescribed burning proposals will impact historic grazing rights on the John Day Allotment. Loss of grazing rights due to burning should be accommodated by the reactivation of the vacant McCullough allotment within the Magone project boundaries. The EIS should document the feasibility of reactivating the McCullough allotment for temporary use in conjunction with prescribed burn block that displace cattle. | Reinitiating grazing on the McCullough allotment is outside the scope of this project. Coordination with the permittees regarding burning within their allotments would be completed in a manner that aims to achieve the desired effect from prescribed burning while minimizing impacts to permittees livestock operations. |
| 413 | SC-22, page 6; SC-24, page 5 | Recreation use of the Magone Lake area need increased monitoring by Forest Service law enforcement, especially in light of the proposed action which will increase recreation use in the area. The Forest Service should install signage indicating livestock presence and speed deterrence controls on the primary access to the Magone Lake area. | Additional signage would be implemented. |
| 414 | SC-25, page 3 | It is unclear if silvicultural treatments will be implemented within riparian habitat conservation areas under the Aquatics Restoration EA. | Riparian enhancement thinning could be implemented within riparian habitat conservation areas under the Aquatic Restoration Decision for lodgepole pine encroachment areas and large and coarse wood placement where impacts to primary shade can be avoided; however, this is not part of the Magone Project. |
| 415 | SC-24, page 1; SC-22, page 3 | Several of the restoration strategies identified under the Aquatic Restoration EA my impact grazing permittees. Information provided at the February 24, 2015 open house was vague and did not provide adequate information as to what actions will occur within allotments. | Actions implemented under the Aquatic Restoration Decision will be implemented following the procedures outlined in that document. The list and description of projects to be implemented each summer will be posted on this website each spring and at least 30 days prior to planned implementation. Projects may also be posted and implemented at other times of the year. A Project Implementation Checklist will be used on each project to ensure all activities are consistent with the Malheur Forest Plan and project design criteria associated with the Aquatic Restoration Decision. |

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| | | | Please see the following website for information on future Aquatic Restoration Projects on the Malheur National Forest:<br>http://www.fs.usda.gov/detailfull/malheur/landmanagement/?cid=STELPRD3817723&width=full |
| 416 | SC-24, page 3 | Exclude customary and essential livestock crossing sites from treatment areas under the Aquatic Restoration EA and install improved stream crossings at sites if livestock disturbance is accentuated due to large wood placement. | The addition of large woody debris to streams is not proposed in the Magone Project, but could be implemented under the Aquatic Restoration Decision.<br>See response to comment #415. |
| 417 | SC-24, page 3 | Do not install riparian exclusion fencing on any streams on the Roundtop Allotment as data, which shows upward ecological trends, does not support additional riparian protection. | Riparian exclusion fencing is not proposed in the Magone Project, but could be implemented under the Aquatic Restoration Decision.<br>See response to comment #415. |
| 418 | SC-26, page 4-5 | Restoration of riparian areas, meadows, and aspens stands should be included in the proposed action. Please analyze all the restoration needs within the watershed, even if it is not financially viable to treat them at this time. | Aquatic restoration specific activities would be implemented under the Aquatic Restoration Decision. Potential projects that could be implemented under this decision in the Magone project planning area are analyzed in the cumulative effects section for each resource.<br>See response to comment #415. |

# Consideration of Science/Literature Submitted by the Public

Members of the Magone Project interdisciplinary team are considered proficient in their field of study by way of academic achievement, training, years of professional experience, and in some cases, certification programs. In addition, team specialists have cited numerous studies and literature to support discussions and conclusions made in this project's analysis (see the literature cited sections of the EIS and its supporting appendices).

Table D-3 summarizes the Forest Service consideration of publications that were provided during the comment period and which were directly referenced in the comments, or determined to either have some relevance to the analysis or indicate there is a difference of opinion within the body of the science. NEPA states that comments on the EIS shall be as specific as possible (40 CFR 1503.3 Specificity of Comments). Some of the following documents are considered non-substantive comments that do not warrant further response. In either case, the following table explains the consideration given by the Forest Service.

**Table D-3. Consideration of science/literature submitted during the scoping period**

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| **Forest vegetation, fire, and fuels** | | | |
| ABC News Australia. 2014. Logging can "greatly increase" fire severity for 50 years, researchers say. August 3. http://www.abc.net.au/news/2014-08-04/logging-greatly-increases-fires-risk-black-saturday-study/5646220 | SC-02, Opposing Views Attachment #3, page 28 | Not applicable | This is not scientific peer reviewed literature. This is a news article from Australia. |
| Aber, J.D.; Melillo, J.M. 1991. | SC-02, Opposing Views Attachment #5, page 11 | Unable to locate source | |
| Aber, J.; Christensen, N; Fernandez, I. [et al.]. 2000. Applying ecological principles to management of U.S. National Forests. Issues in Ecology. 6: 20 p. Ecological Society of America. Washington, D.C. http://digitalcommons.usu.edu/wats_facpub/46/ | SC-02, Opposing Views Attachment #1, page 3; SC-02, Opposing Views Attachment #4, page 3 | Relevant to this project | This is a position paper in which the authors describe what they believe are the ecological considerations that should be incorporated in forest management policy. The paper summarizes some potential effects of timber harvest and roads. However, it is not scientific, peer-reviewed literature.<br>The effects of proposed activities, including timber harvest, on snags and downed wood, structural diversity and impact to tree and stand resiliency can be found in DEIS Chapter 3. The Forest recognizes that timber harvest activities may have detrimental effects as well as the positive effects desired in proposed vegetation treatment activities. The deciding official will consider all effects when making a decision on this project. |
| Agee, J.K. 1997. The severe weather wildfire: Too hot to handle? Northwest Science. 71(1): 153-157. http://www2.for.nau.edu/courses/pzf/FireEcolMgt/Agee_97.pdf | SC-02, Opposing Views Attachment #3, page 1 | Supports the analysis | The document is applicable and consistent with literature used in the analysis. Large, severe wildfires are more weather-dependent than fuel-dependent. Climate plays an important role in the intensity and severity of wildfire. This paper does not consider the significance of the fuels complex and the direct correlation to fire intensity/severity. Fuel condition also affects the intensity/severity and is the only function that can be manipulated in order to reduce future intensities. |
| Al-jabber, J.M. 2003. Habitat fragmentation: effects and implications. Clearcuts and forest fragmentation, Willamette NF, Oregon. Cascadia Wildland Project. http://faculty.ksu.edu.sa/a/Documents/Habitat%20Fragmentation%20Effects%20and%20Implication.pdf | SC-02 Opposing Views Attachment #1, page 2; SC-02, Opposing Views Attachment #4, page 2 | Relevant to this project | This unpublished, non-peer reviewed paper summarizes the general effects of habitat fragmentation (including connectivity, corridors and buffer zones). The Wildlife section of the EIS and species-specific analyses in the Wildlife Report discuss and analyze the impacts of habitat |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | fragmentation.<br>Clearcuts are not prescribed for this area and silviculture and wildlife are working together to avoid fragmentation issues. |
| Ardt, G. 2006. The wolf is at the door, are we ready? The East Oregonian. November 28. | SC-26, page 17 | Unable to locate reference | This is an article by a wildlife habitat biologist with Oregon Department of Fish and Wildlife. |
| Attiwill, P.M. 1994. The Disturbance of forest ecosystems: the ecological basis for conservative management. Forest Ecology and Management. 63(2-3): 247-300.<br>http://www.fs.fed.us/rm/pubs/rmrs_gtr292/1994_attiwill.pdf | SC-02, Opposing Views Attachment #5, page 11 | Relevant to this project | This article discusses many ways natural and artificial disturbance is introduced into a stand. As previous management has opened up the stands to allow shade and fire intolerant species to expand past what was historically the range of variability, our proposal is planned move the project planning area back towards those normal rates of variability. |
| Baker, W.L.; Veblen, T.T.; Sherriff, R.L. 2007. Fire, fuels and restoration of ponderosa pine–Douglas-fir forests in the Rocky Mountains, USA. Journal of Biogeography. 34(2): 251-269.<br>http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2699.2006.01592.x/abstract | SC-26, page 13 | Somewhat applicable | This article discusses the comparison of two fire models using historical records, fire histories, and forest age-structure analyses in ponderosa pine and mixed ponderosa pine-Douglas-fir forests in the US Rocky Mountains. The main conclusions of the article are that fire exclusion has not clearly increased fuels or shifted fire type. However, logging and livestock grazing have increased tree densities and the risk of high severity fires in some areas. Restoration would be most effective if it restores the variability of fire, reverses changes from logging and livestock grazing, and modifies land uses so that degradation is not repeated.<br>This applicability of this article is somewhat limited because it focuses specific ally on conditions in the US Rocky Mountains. The conclusion that restoring the variability of fire would be effective is consistent with the treatments proposed as part of the Magone Project. |
| Barry, G. 2002. Commercial logging causes wildfires. Portland, OR: Portland Independent Media Center. August.<br>http://portland.indymedia.org/en/2002/08/17464.shtml | SC-02, Opposing Views Attachment #1, page 3; SC-02, Opposing Views Attachment #3, page 1 | Not applicable | Non-peer reviewed article denounces all commercial timber harvest on National Forest System lands. This document is an opinion piece that has not been published in a scientifically peer reviewed outlet. The document and its findings have not been subjected to the rigors of formal technical or peer review. |
| Barry, J.B. 1999. Stop the logging, start the restoration. | SC-02, Opposing Views | Not applicable | This is not scientific peer reviewed literature. This is an opinion paper published in a 1999 Sierra Club |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| The Planet, a newsletter of the Sierra Club. 6(5). http://www.sierraclub.org/planet/199905/ecl1.asp | Attachment #1, page 4 | | newsletter supporting and advocating an end to the Forest Service timber sale program. It cites a 1998 poll that states that 69 percent of Americans oppose commercial logging on federally owned land; and a Forest Service poll that showed 59 percent of Americans who expressed an opinion oppose timber sales and other commodity production in national forests.<br>The Club supported a bipartisan National Forest Protection and Restoration Act that would eliminate money-losing commercial logging in national forests, promote restoration and help communities that receive logging revenue develop more diverse and stable economies. This Act did not become law. |
| Beetle Mania. Biodiversity Conservation Alliance. Laramie, WY. http://www.voiceforthewild.org/clearcutting/beetle_mania.html | SC-02, Opposing Views Attachment #17, page 3 | Not applicable | This is not scientific peer reviewed literature. This writing is from a private citizen non-profit advocacy organization doing their specific outreach and education. |
| Bellinger, R.G.; Ravlin, F.W.; McManus, M.L.1989. Forest edge effects and their influence on gypsy moth (Lepidoptera: Lymantriidae) egg mass distribution. Environmental Entomology. 18(5). 840-843. | SC-02, Opposing Views Attachment #1, page 3 | Unable to discover accessible link | Unable to discover an accessible copy or link to this reference. |
| Berry, A. 2007. Forest policy up in smoke: fire suppression in the United States. Property and Environment Research Center. http://perc.org/sites/default/files/Forest%20Policy%20Up%20in%20Smoke.pdf | SC-02, Opposing Views Attachment #3, page 2 | Not applicable | This paper speaks mainly to national policy that cannot be changed with the Magone Project. This is not scientific peer reviewed literature |
| Bessie, W.C.; Johnson, E.A. 1995. The relative importance of fuels and weather on fire behavior in subalpine forests. Ecology. 76(3): 747-762. http://www.jstor.org/pss/1939341 | SC-02, Opposing Views Attachment #3, page 2 | Not applicable | Paper discusses relationship between fuels and climate as related to fire behavior in the southern subalpine fir forests of Canada. |
| Bird, B. 2007. Fires normal part of ecology: fear of fires ungrounded. Mountain View Telegraph. December 20. http://www.wildearthguardians.org/site/News2?page=NewsArticle&id=5790#.VQdhxZgcSic | SC-02, Opposing Views Attachment #3, page 2 | Not used | This is not scientific peer reviewed literature. This opinion paper discusses the direct effects of climate and does not consider the correlation to the fuels complex. |
| Black, B.A.; Colbert, J.J.; Pederson, N. 2008. Relationship between radial growth rates and lifespan within North American tree species. Ecoscience 15(3): 349-357. | SC-02, Opposing Views Attachment #5, page 3 and 14; | Not applicable | This article is about logging to control insect infestations. Our planned activities are not designed around controlling existing infestations, but more to create an environment that makes |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| http://www.bioone.org/doi/full/10.2980/15-3-3149 | SC-26, page 18 | | existing older trees of a variety of species more resilient to insect attacks when they occur. |
| Black, S.H.; Kulakowski, D.; Noon, B.R. DellaSala, D.A. 2013. Do bark beetle outbreaks increase wildfire risks in the central U.S. Rocky Mountains? Implications from recent research. Natural Areas Journal. 33(1): 59-65. http://www.bioone.org/doi/abs/10.3375/043.033.0107 | SC-02, Opposing Views Attachment #17, pages 8-9 | Not applicable | This article focuses on lodgepole and Engelmann spruce in Colorado. The Magone project planning area, located in Oregon, has negligible amounts of lodgepole and possibly no Engelmann spruce. Not in the purpose and need. |
| Bond, M.L.; Lee, D.E.; Bradley, C.M.; Hanson, C.T. 2009. Influence of pre-fire tree mortality on fire severity in conifer forests of the san Bernardino mountains, California. The Open Forest Science Journal. 2: 41-47. http://www.biologicaldiversity.org/publications/papers/Bond_et_al.pdf | SC-02, Opposing Views Attachment #5, page 15 | Outside scope of this project | This article disputes that removing dead trees larger than 61 cm (24 inches) does not effectively reduce higher-severity fires. This project does not propose to remove dead or live trees larger than >53 cm (20.9 inches) |
| Boxall, B. 2010. Bark beetles may kill trees, but that may not raise fire risk. Los Angeles Times. September 26. http://articles.latimes.com/2010/sep/26/nation/la-na-beetle-fire-20100926 | SC-02, Opposing Views Attachment #5, page 26 | Not applicable | This is not scientific peer reviewed literature. This is a newspaper article. |
| Bozeman Daily Chronicle. 2009. Yellowstone fires have potential to grow much larger. September 24. http://bozemandailychronicle.com/articles/2009/09/25/news/70fires.txt | SC-02, Opposing Views Attachment #8, page 1 | Not applicable | This is not scientific peer reviewed literature. This is a newspaper article. |
| Bunnell, F.L.; Squires, K.A.; Houde, I. 2004. Evaluating the effects of large-scale salvage logging for mountain pine beetle on terrestrial and aquatic vertebrates. Natural Resources Canada, Canadian Forest Service, Pacific Forestry Centre, Victoria, BC. Mountain Pine Beetle Initiative Working Paper 2004-02. 57 p. http://www.cfs.nrcan.gc.ca/publications?id=25154 | SC-02, Opposing Views Attachment #4, page 6 | Not applicable | The article is focused on large-scale salvage logging in bug-killed timber in Canada and the effect it could have on different animal species. The actions proposed for the Magone project planning area have been in collaboration with the fish and wildlife biologists on the district, to ensure habitat is being minimally impacted, and in some cases, avoided altogether. No salvage logging is proposed in the Magone Project. |
| Daily Camera. 2013. CU-Boulder researchers see an upside to pine beetle kill. January 15. http://www.dailycamera.com/cu-news/ci_22378043/cu-boulder-researchers-see-an-upside-pine-beetle | SC-02, Opposing Views Attachment #17, page 5 | Not applicable | This is not scientific peer reviewed literature. This is a news article. |
| Campbell, R.W.; Torgersen, T.R.; Srivastava, N. 1983. A suggested role for predaceous birds and ants in the population dynamics of the western spruce budworm. Forest Science. 29(4). 779-790. http://www.ingentaconnect.com/content/saf/fs/1983/00000 | SC-02, Opposing Views Attachment #1, page 3 | Not applicable | The article speaks to removing dead and dying trees. The actions proposed for the Magone Project would leave standing dead, as well as large downed woody material throughout the planning area. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| 029/00000004/art00015 | | | |
| Campbell, J.; Donato, D.; Fontaine, J. [et al.]. 2003. Biscuit Fire Study. Oregon State University Department of Forest Science. http://terraweb.forestry.oregonstate.edu/biscuit.htm | SC-02, Opposing Views Attachment #8, page 1 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Campbell, J. 2014. Study finds logging increased intensity of Black Saturday fires. Herald Sun. August 3. http://www.heraldsun.com.au/news/victoria/study-finds-logging-increased-intensity-of-black-saturday-fires/story-fni0fit3-1227012027799 | SC-02, Opposing Views Attachment #3, page 29 | Not applicable | This is not scientific peer reviewed literature. This is a news article from Australia. |
| Canadian Forest Service. 2003. Native forest insects and diseases. http://www.health.cfs.nrcan.gc.ca/borealshield/nativeinsectsanddiseases_e.html | SC-02, Opposing Views Attachment #5, page 11 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| CBS News. 2009. Fighting fire in the forest. June 17. http://www.cbc.ca/canada/story/2009/06/17/f-forest-fires.html | SC-02, Opposing Views Attachment #8, page 4 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Center for Biological Diversity and the John Muir Project. 2014. Nourished by wildfire: the ecological benefits of the Rim Fire and the threat of salvage logging. January: 11 p. http://www.biologicaldiversity.org/species/birds/black-backed_woodpecker/pdfs/Nourished_by_Wildfire.pdf | SC-02, Opposing Views Attachment #8, page 14 | Not applicable | This is not scientific peer review literature. This paper is from an environmental advocacy group discussing the potential ecological effects of salvage logging in the Rim Fire in California. No salvage logging is proposed in the Magone Project. |
| Churchill, D.J., M.C. Dalhgreen, A.J. Larson, and J.F. Franklin. 2013a. The ICO approach to restoring spatial pattern in dry forests: implementation guide. Version 1.0. Stewardship Forestry, Vashon, Washington, USA. http://faculty.washington.edu/jlutz/Publications/ICO_Manager_Guide.pdf | SC-26, page 10 | Somewhat applicable | The Malheur National Forest differs from the rest of the Blue Mountains, having a larger proportion of the dry conifer forests. The PNW GTR submission has some of the studies that have been done. The Malheur group/opening is similar to the ICO implementation guide, but more specific to the local conditions.<br>Churchill, D.J., G.C. Carnwath, A.J. Larson, and S.A. Jeronimo [N.d.]. Historical forest structure, composition, and spatial pattern in dry conifer forests of the western Blue Mountains. Manuscript in preparation. |
| Churchill, D.J., A.J. Larson, M.C. Dahlgreen, J.F. Franklin, P.F. Hessburg, and J.A. Lutz. 2013b. Restoring forest resilience: from reference spatial patterns to silvicultural prescriptions and monitoring. Forest Ecology and Management. 291: 442-457. | SC-26, page 10 | Applicable | The treatments proposed in the Magone Project are planned to help restore forest resilience through selective patches and gaps. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5428873.pdf | | | |
| Coe, N.J. 2011. Forestry shouldn't be an 'industry.' Durango Herald. February 12. http://www.durangoherald.com/article/20110213/OPINION03/702139987/Forestry-shouldn%E2%80%99t-be-an-%E2%80%98industry%E2%80%99 | SC-02, Opposing Views Attachment #3, page 3 | Not applicable | This is a letter to the editor published in the Durango Herald and is an opinion piece that has not been published in a scientifically peer reviewed outlet. The document and its findings have not been subjected to the rigors of formal technical or peer review. |
| Cohen, J.D. 2008. The wildland-urban interface fire problem—a consequence of the fire exclusion paradigm. Forest History Today. Fall issue: 20-26. http://www.foresthistory.org/Publications/FHT/FHTFall2008/Cohen.pdf | SC-02, Opposing Views Attachment #11, pages 5-6; SC-26, page 19 | Limited applicability | The Grant County Community Wildfire Protection Plan (CWPP) allows a community to evaluate its current situation regarding wildfire risk and plan ways to reduce risk for protection of human welfare and other important economic, social, or ecological values. The CWPP may address issues such as community wildfire risk, structure flammability, hazardous fuels and non-fuels mitigation, community preparedness, and emergency procedures. Representatives from the U.S. Forest Service and the Bureau of Land Management should be engaged in the CWPP process as consultants. |
| Cohen, J.D. 2001. Wildland-urban fire—a different approach. In: Proceedings of the firefigther safety summit, International Association of Wildland Fire, Missoula, MT. http://www.angelfirenm.gov/assets/documents/CWPPAppendixE-9ce7d27514.pdf | SC-02, Opposing Views Attachment #11, page 3 | Limited applicability | Fire is an intrinsic process of North American ecosystems. However, past activities have led to uncharacteristic wild fires. This article discusses the ignitability of homes in the wildland-urban interface and the responsibility of homeowners in ensuring that their properties have low ignitability in the event of a wildland fire. The Magone Project focuses on reducing the effects of uncharacteristic wildfire within the project planning area, including the wildland-urban interface. The Grant County Community Wildfire Protection Plan provides a link between landowners and federal officials allowing both parties to come together and do their part to minimize impacts to private land from wildland fires. |
| Cohen, J.D. 2000. Examination of the home destruction in Los Alamos associated with the Cerro Grande Fire, July 10, 2000. Fire Sciences Laboratory. Missoula, MT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 6 p. http://www.fs.fed.us/rm/pubs_other/rmrs_2000_cohen_j00 | SC-02, Opposing Views Attachment #11, page 5 | Limited applicability | The Grant County Community Wildfire Protection Plan (CWPP) allows a community to evaluate its current situation regarding wildfire risk and plan ways to reduce risk for protection of human welfare and other important economic, social, or ecological values. The CWPP may address issues such as |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| 1.pdf | | | community wildfire risk, structure flammability, hazardous fuels and non-fuels mitigation, community preparedness, and emergency procedures. Representatives from the U.S. Forest Service and the Bureau of Land Management should be engaged in the CWPP process as consultants. |
| Cohen, J. D. 2000. Preventing disaster: home ignitability in the wildland-urban interface. Journal of Forestry. 98(3): 15-21. http://www.fs.fed.us/rm/pubs_other/rmrs_2000_cohen_j002.pdf | SC-02, Opposing Views Attachment #11, pages 9-10 | Not applicable | Article discusses the ignitability of homes in the wildland-urban interface and the responsibility of homeowners in ensuring that their properties have low ignitability in the event of a wildland fire. |
| Cohen, J.D. 1999. Reducing the wildland fire threat to homes: Where and how much? In: González-Cabán, A.; Omi, P.N., tech. coords. Proceedings of the symposium on fire economics, planning, and policy: bottom lines. Gen. Tech. Rep. PSW-GTR-173. Albany, CA: U.S Department of Agriculture, Forest Service, Pacific Southwest Research Station: 189-195. http://www.fs.fed.us/rm/pubs_other/rmrs_1999_cohen_j001.pdf | SC-02, Opposing Views Attachment #11, pages 3-4 | Limited applicability | The Grant County Community Wildfire Protection Plan (CWPP) allows a community to evaluate its current situation regarding wildfire risk and plan ways to reduce risk for protection of human welfare and other important economic, social, or ecological values. The CWPP may address issues such as community wildfire risk, structure flammability, hazardous fuels and non-fuels mitigation, community preparedness, and emergency procedures. Representatives from the U.S. Forest Service and the Bureau of Land Management should be engaged in the CWPP process as consultants. |
| Cohen, J.D.; Butler, B.W. 1998. Modeling potential structure ignitions from flame radiation exposure with implications for wildland/urban interface fire management. In: Proceedings of the 13th fire and forest meteorology conference. Lorne, Australia. http://www.fs.fed.us/rm/pubs_other/rmrs_1998_cohen_j001.pdf | SC-02, Opposing Views Attachment #11, page 9 | Limited applicability | See the above response to comment. |
| Cohen, J.D.; Saveland, J. 1997. Structure ignition assessment can help reduce fire damages in the WUI. Fire Management Notes. 57(4): 19-23. http://www.fs.fed.us/rm/pubs_other/rmrs_1997_cohen_j001.pdf | SC-02, Opposing Views Attachment #11, pages 4-5 | Limited applicability | See the above response to comment. |
| Crist, M.R., T.H. DeLuca, B. Wilmer, and G.H. Aplet. 2009. Restoration of low-elevation dry forests of the Northern Rocky Mountains: a holistic approach. The | SC-26, page 7 | Limited applicability | This document is focused on the ecology of the Northern Rocky Mountains and opportunities for restoration in that area. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Wilderness Society, Washington, D.C. http://www.fedgycc.org/documents/WldrnsSociety_Restoration-Low-Elev-Dry-Forests-Rocky-Mtns.pdf | | | |
| CTV.ca News. 2010. Could pine beetles actually reduce forest fire risk? September 12. http://www.ctvnews.ca/could-pine-beetles-actually-reduce-forest-fire-risk-1.551560 | SC-02, Opposing Views Attachment #17, page 2 | Not applicable | This is not scientific peer reviewed literature. This is a news article. |
| Cushman, J.H. 1999. Audit faults Forest Service on logging damage in U.S. Forests. New York Times. February 5. http://query.nytimes.com/gst/fullpage.html?res=9B00E2DF163BF936A35751C0A96F958260&sec=&spon=&pagewanted=print | SC-02, Opposing Views Attachment #1, page 5 | Not relevant to this project | The article is a summary of an Agriculture Department Inspector General's report that reviewed 12 timber sales from 1995 to 1998. The article states the report found fault with both the environmental assessments for the projects and that "rules" were not followed when the sales were implemented on the ground.<br>The report looked at a number of timber sale contracts and NEPA project-level analyses to determine compliance with mitigations and terms of the decisions and contracts. The article was not applied by the commenter to the site-specific aspect of the Magone Project NEPA analysis. Programmatic reviews such as the one discussed in the article are not specific to this project's site-specific environmental analysis. |
| DeMars, C. J.; Roettgering, B. H. 1982. Western pine beetle. http://www.forestpests.org/acrobat/fidl1.pdf | SC-02, Opposing Views Attachment #5, page 13 | Not applicable | This article points out that group killing of pine occurs throughout ages and vigor classes, most commonly in dense, overstocked stands of both pure even-aged young trees, but also in dense clumps of pine in stagnating mixed conifer stands. The purpose of the Magone Project is not to suppress the persistence of high populations of pine beetle, but to remove some of the density in the overstocked stand. |
| Denver Post. Pine beetles' role in fire risk devalued. http://www.denverpost.com/news/ci_6520740 | SC-02, Opposing Views Attachment #17, page 4 | Not applicable | This is not scientific peer reviewed literature. This is a newspaper article. |
| Deschutes National Forest. 2007 Lava Cast Project Decision Notice. February. | SC-26, page 10 | Not applicable | The commenter refers to the rationale used to an amendment to the Regional Forester's Eastside Forest Plan Amendment 2, 6d(2)(a): "Maintain all remnant late and old seral and/or structural live trees ≥21" DBH that currently exist within stands proposed for harvest activities" in the Lava Cast |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | Project on the Deschutes National Forest. A forest plan amendment to allow removal of trees greater than 21 inches is not proposed under any of the alternatives in the Magone Project. |
| Dombeck, M. 1998. A message on "conservation leadership" sent to all U.S. Forest Service employees on July 1.<br>http://www.wvhighlands.org/VoicePast/VoiceAug98/Dombeck.Aug98.html | SC-02, Opposing Views Attachment #1, page 6 | Not relevant to this project | This is a message from then-Chief Mike Dombeck sharing his view on what makes a "conservation leader" in the context of his natural resource agenda.<br>It is not specific to any laws, regulations, or policies that would be pertinent to the Magone Project analysis. |
| Dombeck, M. 1998. Through the woods. The News Hour with Jim Lehrer. June 19.<br>http://www.pbs.org/newshour/bb/fedagencies/jan-june98/road_6-19.html | SC-02, Opposing Views Attachment #1, page 5 | Not applicable | This is a non-scientific transcript of a radio broadcast discussing effects of ceasing to build roads in roadless areas. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Duncan, S. 2002. Postfire logging: Is it beneficial to a forest? Science Findings 47. Portland, OR: U.S. Department of Agriculture Forest Service, Pacific Northwest Research Station. 6 p.<br>http://www.fs.fed.us/pnw/sciencef/scifi47.pdf | SC-02, Opposing Views Attachment #8, page 3 | Not applicable | Post-fire logging is not part of the purpose and need or included in the proposed action or alternatives for this project. |
| Egan, Timothy. 2000. Fires not caused by reduced logging, congressional report finds. New York Times. September 1.<br>http://www.nytimes.com/2000/09/01/us/fires-not-caused-by-reduced-logging-congressional-report-finds.html | SC-02, Opposing Views Attachment #3, page 27 | Not applicable | This is not scientific peer reviewed literature. This is a newspaper article. |
| Ehrlich, A.; Foster, D.; Raven, P. 2002. Call to end logging based on conservation biology. Native Forest Network.<br>http://www.nativeforest.org/campaigns/public_lands/stb_5_30_02.htm | SC-02, Opposing Views Attachment #1, page 6 | Not relevant to this project | In 2003, 221 PhD-level scientists signed a letter to President Bush urging him to end commercial logging and road construction in National Forests and invest in forest restoration. They believed that protecting national forests creates more economic benefits than continued logging and advocate a shift in federal funding of the timber sale program into a program that pays local contractors to restore national forests. It represents an opinion that contains no sources, references, or literature cited and is not scientific, peer-reviewed literature.<br>The authors' recommendations regarding the federal timber sale program are not specific to this project. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Engelfried, N. 2013. Stop drilling and logging on federal lands while the public is kept out. A petition targeted for Secretary of the Interior Sally Jewel and Secretary of Agriculture Tom Vilsack. Posted at FORCECHANGE.COM. http://forcechange.com/86223/stop-drilling-and-logging-on-federal-lands-while-the-public-is-kept-out/ | SC-02, Opposing Views Attachment #1, page 53 | Not applicable | This is a petition form letter on the forcechange.com website aimed at gathering signatures for submission to federal officials. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. |
| Environmental Literacy Council. 2008. Forest Fires. http://www.enviroliteracy.org/article.php/46.html | SC-02, Opposing Views Attachment #8, page 4 | Not applicable | This is not scientific peer reviewed literature. This writing is from a private citizen non-profit advocacy organization doing their specific outreach and education. |
| Evans, C. 2012. Verdict's still out on pine beetle kill fire effects. Colorado arts and science. http://artsandsciences.colorado.edu/magazine/2012/10/verdicts-still-out-on-pine-beetle-kill-fire-effects/ | SC-02, Opposing Views Attachment #17, pages 4-5 | Not Applicable | This is not scientific peer reviewed literature. It is an article in a college magazine. |
| Firescience.gov News. 2013. Fuel treatments and fire severity: a meta-analysis. Issue 58. June 7. http://us2.campaign-archive1.com/?u=5f6de7b069a57255f980944b4&id=97915ceb5e&e=47edde4b58 | SC-26, page 14 | Unable to locate reference | Link is broken. |
| Forest Conservation News Today. 2002. Bush fire policy: clearing forests so they do not burn. August 27. http://forests.org/archived_site/today/recent/2002/tiporefl.htm | SC-02, Opposing Views Attachment #1, page 7. SC-02, Opposing Views Attachment #3, page 3 | Not applicable | The article is an opinion piece and not a peer reviewed scientific study on President Bush's plan to "increase logging on federal lands in order to reduce the risk of wildfires." |
| Forest Policy Research. 2008. California: too often thinning treatments tend to increase fire hazards. http://forestpolicyresearch.org/2008/12/19/california-too-often-thinning-treatments-tend-to-increase-fire-hazards/ | SC-02, Opposing Views Attachment #3, page 4 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Forest Policy Research. 2008. Montana: Blackfoot Clearwater Stewardship Proposal is all about selling out to Pyramid lumber. http://forestpolicyresearch.org/2008/12/19/blackfoot-clearwater-stewardship-proposal-is-all-selling-out-to-pyramid-lumber/ | SC-02, Opposing Views Attachment #3, page 4 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Forests Monitor. 2006. Environmental Impacts of Logging. http://www.forestsmonitor.org/en/reports/550066/550083 | SC-02, Opposing Views Attachment #1, page 51 | Not applicable | This is a news article/opinion piece discussing the impacts of logging operations in a number of countries (Papua New Guinea, Solomon Islands, Cameroon, etc.). It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. The logging practices |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | reflected in this article do not reflect modern forestry practices on National Forest System lands. |
| Forest Watch. 2002. From an April 16 letter to President Bush asking him to stop all logging in the national forests. http://www.forestwatch.org/content.php?id=108 | SC-02, Opposing Views Attachment #1, pages 40-49 | Not relevant to the project | The article is an opinion piece and not a peer reviewed scientific study. |
| Franklin, J.F., and K.N. Johnson. 2013. Restoration of dry forests in eastern Oregon—a field guide. The Nature Conservancy: Portland, OR. http://nature.ly/dryforests | SC-26, page 16 | Relevant to the project and used for development of the proposed action | This book is a field guide for restoration treatments in the dry forests of eastern Oregon. Many of the concepts, including the reasonable limitations on the removal of large trees, were incorporated into the Big Mosquito Project. |
| Franklin, J.F.; Agee, J.K. 2007. Forging a science-based national forest fire policy. Issues in Science and Technology. 20: 59-66. http://www.issues.org/20.1/franklin.html | SC-02, Opposing Views Attachment #1, page 8. SC-02, Opposing Views Attachment #8, page 5 | Provides background info applicable to this project | This paper is applicable and consistent with other literature used in the analysis. |
| Franklin, J.; Perry, D.; Noss, R.; Montgomery, D.; Frissell, C. 2000. Simplified forest management to achieve watershed and forest health: a critique. http://www.coastrange.org/documents/forestreport.pdf | SC-02, Opposing Views Attachment #1, page 7. SC-02, Opposing Views Attachment #4, page 10 | Relevant to the project | This is a report by a non-government organization and is not peer-reviewed literature. It presents an approach to forest management to achieve watershed and forest health. Many of the concepts proposed are already in use within the Forest Service. This document offers a perspective on whether cutting trees can help protect forest values. It is part of an ongoing debate about the role of silviculture in management and restoration. |
| Franklin, J. [et al.]. 1989. | SC-02, Opposing Views Attachment #1, page 3 | Unable to locate reference | Could not locate article based on the citation given. |
| Frey, D. 2010. Logging won't halt beetles, fire, report says. NewWest.net. March 3. http://www.newwest.net/topic/article/logging_wont_halt_beetles_fire_report_says/C41/L41/ | SC-02, Opposing Views Attachment #3, page 5. SC-02, Opposing Views Attachment #4, page 10. SC-02, Opposing Views Attachment #5, page 16. SC-02, Opposing Views Attachment #17, pages 7-8 | Not relevant to the project | The excerpt is from an article reporting on a report by an Oregon-based conservation group, National Center for Conservation Science and Policy, which states efforts to log beetle-killed trees will not reduce fire risk or beetle outbreaks. The report authors encourage fuels projects that are focused around the edges of communities. The Magone Project purpose and need does not include an objective to reduce fire risk or to reduce beetle outbreaks. |
| Gable, E. 2010. Battling beetles may not reduce fire risks – report. Land Letter. March 4. http://www.xerces.org/2010/03/04/battling-beetles-may-not-reduce-fire-risks-report/ | SC-02, Opposing Views Attachment #3, page 5. SC-02, Opposing Views Attachment #4, page 12. SC-02, Opposing | Not applicable | This article discusses the mountain pine beetle epidemic in Colorado. The Magone Project purpose and need does not include an objective to reduce beetle outbreaks; however, the proposed action would make the forest more resilient to beetle |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | Views Attachment #5, page 17. SC-02, Opposing Views Attachment #17, pages 2-3 | | attack. |
| Giuliano, J.A. 2008. Fire suppression Bush style: cut down the trees! Environmental News Service. http://www.ens-newswire.com/ens/aug2002/2002-08-23g.asp | SC-02, Opposing Views Attachment #1, page 8 | Not applicable | This is a news article/opinion piece discussing opposition to forest and wildfire risk reduction policies under the President Bush administration. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Gorte, R.W. 2008. Wildfire damages to homes and resources: understanding causes and reducing losses. Congressional Research Service Report. June 8. http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL34517.pdf | SC-02, Opposing Views Attachment #3, page 5. SC-02, Opposing Views Attachment #8, page 5 | Not applicable | This is a report prepared by the Congressional Research Service for members and committees of Congress. The purpose of the Magone Project is not to eliminate wildfires. |
| Gorte, R.W. 2005. Forest fire/wildfire protection. Congressional Research Service Report. February 14. http://www.coloradofirecamp.com/congressional_research/forest-fire-wildfire-effects.htm | SC-02, Opposing Views Attachment #8, pages 2 and 5 | Consistent with analysis | The overall purpose of this project is to restore forest resiliency by reestablishing and restoring forest structure and pattern, vegetation composition and diversity, and riparian communities to conditions that are more resilient to natural disturbance processes, including wildfire. |
| Gorte, R.W. 1995. Forest Service timber sale practices and procedures: analysis of alternative systems. Congressional Research Service Report. October 30. http://www.ncseonline.org/NLE/CRS/abstract.cfm?NLEid=215 | SC-02, Opposing Views Attachment #1, page 10 | Not applicable. | This report describes the Forest Service timber sale system circa 1995 and the major concerns over the consequences of the sale system. It then reviews the option of a complete overhaul of the current approach that would separate the timber cutting and removal from the sale of the wood, and analyzes the consequences of this approach. This is not applicable to analysis of the environmental effects of the proposed actions.<br>Changes to the practices and procedures of the Forest Service timber sale system cannot be made or analyzed at the project level. |
| Government Accounting Office.1999. Western national forests: a cohesive strategy is needed to address catastrophic wildfire threats. GAO/RCED-99-65. http://www.gao.gov/archive/1999/rc99065.pdf | SC-02, Opposing Views Attachment #1, page 9; SC-02, Opposing Views Attachment #3, page 6. | Not relevant to this project | The citation references the effects of thinning treatments to reduce wildfire risk. While the Magone Project does propose thinning, the project's purpose and need does not include a reduction in risk of wildfire. |
| Gregory, L.D. 2004. Wildland Fire use: an essential fire management tool. A wilderness society policy and science | SC-02, Opposing Views Attachment #8, page 6 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| brief. December. http://wilderness.org/library/documents/upload/sciencebrief-wildlandfireuseessentialtool.pdf | | | |
| Haberman, D. 2002. End logging in Indiana State Forests. Indiana Daily Student. January 9. http://www.idsnews.com/news/story.aspx?id=19735&comview=1 | SC-02, Opposing Views Attachment #21, page 6 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Hagle, S.; Schmitz, R. 1993. Managing root disease and bark beetles: beetle-pathogen interactions in conifer forests. Academic Press, New York: 209-228. | SC-02, Opposing Views Attachment #5, page 13 | Unable to locate reference | |
| Hall, J.P.; Moody, B.H. 1994. Forest depletions caused by insects and diseases in Canada 1982-1987. Vol. 8. http://cfs.nrcan.gc.ca/pubwarehouse/pdfs/10133_e.pdf | SC-02, Opposing Views Attachment #5, page 11 | Not applicable | This is a report on the loss of timber volume caused by insects and disease in Canada from 1982 to 1987. As we are not trying to eliminate infestations, but are instead trying to make forests more resilient to infestations, the necessary ecological functions these agents provide would not be adversely affected. |
| Hansen, C. 1999. Ending timber sales on national forests: THE FACTS (FY '97). Published in the Earth Island Journal. http://www.johnmuirproject.org/pdf/Fy-1997-Economic-Report-Ending-Timber-Sales.pdf | SC-02, Opposing Views Attachment #1, page 51 | Not Applicable | This is an opinion piece discussing the author's opposition to timber sales on National Forests. |
| Hanson, C. 2000. Commercial logging doesn't prevent catastrophic fires, it causes them. New York Times. May 19. http://www.commondreams.org/views/051900-101.htm | SC-02, Opposing Views Attachment #1, page 10; SC-02, Opposing Views Attachment #3, page 6 | Not Applicable | This is a news article/opinion piece discussing the author's opposition to using vegetation management practices to reduce fuels and wildfire risk. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Hanson, C. 2000. The big lie: logging and forest fires. Earth Island Journal. Spring. http://yeoldeconsciousnessshoppe.com/art6.html | SC-02, Opposing Views Attachment #3, page 28 | Not applicable | This is not scientific peer reviewed literature. This writing is opinion from a private citizen advocacy organization doing their specific outreach and education. |
| Hanson, C. 2001. Logging for dollars in national forests. The Sacramento Bee. November 14. http://www.johnmuirproject.org/news-logging-for-dollars.html | SC-02, Opposing Views Attachment #1, page 11 | Not applicable | This is an opinion piece discussing the author's opposition to salvaging in post-fire old growth areas in California. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. Post-fire salvaging is not a proposed action of this project. |
| Hanson, C. 2008. Logging industry misleads on climate and forest fires. New West. July 11. | SC-02, Opposing Views Attachment #1, page 11 | Not applicable | This is a non-scientific guest commentary in which the author discusses his contention that forest |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| http://www.newwest.net/topic/article/logging_industry_misleads_on_climate_and_forest_fires/C41/L41/ | | | management should not be used as a tool to reduce wildland fires and mitigate climate change. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Hanson, C. 2010. New report debunks myth of "catastrophic wildfire." February 2. http://johnmuirproject.org/documents/myth%20of%20catastrophic%20wildfire%20media%20release.pdf | SC-02, Opposing Views Attachment #8, page 6. | Unable to locate reference | |
| Harvey, A.E.; Larsen, M.J.; Jurgensen, M.F. 1976. Distribution of ectomycorrhizae in a mature Douglas-fir/larch forest soil in western Montana. Forest Science. 22(4): 393-398. http://www.ingentaconnect.com/content/saf/fs/1976/00000022/00000004/art00007;jsessionid=l2sdf2hphia2.alexandra | SC-02, Opposing Views Attachment #1, page 11 | Limited applicability to this project | The authors conclude that soil organic matter is important in the formation and activity of mycorrhizae. This paper is of limited applicability to the Magone Project because 1) proposed activities would move soil organic matter back toward levels found before fire suppression (see Soil section in the EIS); 2) there is no evidence that somewhat decreased levels of organic matter or mycorrhizae would degrade productivity or other ecosystem function outside the prehistoric range of variability; and 3) soil parent material in the study area is limestone, which may affect mycorrhizae radically differently from parent material in Magone project planning area. |
| Hermach, T. 2007. The skinny on thinning: Should we save the forest from itself? Eugene Weekly Viewpoint. November 1. http://www.eugeneweekly.com/2007/11/08/views1.html | SC-02, Opposing Views Attachment #3, page 7 | Not applicable | This is an opinion piece discussing the author's opposition to vegetation management practices to reduce wildland fire risks. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Hessburg, P. 2004. Evidence for the extent of mixed-severity fires in pre-management era dry forests of the Inland Northwest. Proceedings: Mixed-Severity Fire Regimes: Ecology and Management. Spokane, WA. http://www.sustainablenorthwest.org/bmfp/hessburg__salter__james_paper_11.pdf | SC-26, page 13 | Unable to locate reference | Link provided is broken. |
| Higgins, M. 2000. National forest logging is bad business, study says. CNN.com-Nature. March 16. http://edition.cnn.com/2000/NATURE/03/16/forest.logging.enn/index.html | SC-02, Opposing Views Attachment #1, page 54 | Not applicable | This is a news article/opinion piece reviewing a study by the National Forest Protection Alliance and the Forest Conservation Council. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Houston, A. 1997. Why forestry is in trouble with the public. Evergreen Magazine. October. | SC-02, Opposing Views Attachment #1, page 12 | Not relevant | Magazine is not peer-reviewed, scientific literature. It contains no sources, references, or literature |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| http://evergreenmagazine.com/web/Why_forestry_is_in_trouble_with_the_public-v2.html | | | cited. The author suggests that the public does not trust those who manage forests or understand forest management practices. This project has followed NEPA procedures for public comment and review (see the Public Involvement section in EA Chapter 1). |
| H. R. 1494 text. April 4, 2001. http://www.agriculturelaw.com/legis/bills107/hr1494.htm | SC-02, Opposing Views Attachment #1, page 12 | Not relevant | This was a bill introduced in 2001 to the House of Representatives and is not peer-reviewed, scientific literature. It contains no sources, references, or literature cited. The Magone Project was planned using current law, policy, and regulation as its foundation for devising the proposed project. |
| Hudak, M. 1999. From prairie dogs to oysters: how biodiversity sustains us. EarthTimes [Newsletter of Earth Day Southern Tier] February/March.<br>Book review of "The work of nature: how the diversity of life sustains us," by Yvonne Baskin, 1997. http://www.mikehudak.com/Articles/FromPrairieDogs9902.html | SC-02, Opposing Views Attachment #1, page 13 | Not relevant to this project | The article is a book review, not a scientific study with peer review. Hudak states the book is written for the general audience and that it clearly explains environmental concepts and components, such as biodiversity, ecosystem services, and keystone species. He concludes that the reader can use the facts in the book to protect endangered species and other environmental components. |
| Huff, M.H.; Ottmar, R.D.; Alvarado, E. [et al.]. 1995. Historical and current forest landscapes in eastern Oregon and Washington. Part II: Linking vegetation characteristics to potential fire behavior and related smoke production. Gen. Tech. Rep. PNW-GTR-355. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. | SC-02, Opposing Views Attachment #1, page 13. SC-02; Opposing Views Attachment #3, page 8 | Consistent with project | This study examined changes in vegetation structure and composition in 6 river basins in eastern Oregon and Washington from 1940 to 1990, and projects the effects of vegetation changes on potential fire behavior and smoke production. The report states that prescribed fire along with mechanical measures can be used for restoration purposes to regulate stand composition, reduce plant competition, and modify fuels to achieve a desired structure. This is consistent with the management activities proposed with the Magone Project. |
| Hughes, J.; Drever, R. 2001. Salvaging solutions: science-based management of BC's pine beetle outbreak. A report commissioned by the David Suzuki Foundation, Forest Watch of British Columbia (a project of the Sierra Legal Defence Fund), and Canadian Parks and Wilderness Society – B.C. Chapter. Vancouver, British Columbia, Canada. | SC-02, Opposing Views Attachment #5, pages 13-14 | Not applicable | This article is related to large-scale insect infestation. The proposed actions in the Magone project planning area are designed to decrease competition from current overstocking, making the stands more resilient to insect and disease infestation. No salvage logging is proposed in the Magone Project. |
| Hutto, R.L. 2008. The ecology of severely burned forests. Counterpunch. July 19/20. | SC-02, Opposing Views Attachment #8, page 7 | Not applicable | This is not scientific peer reviewed literature. This is an opinion article for a website. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| http://www.counterpunch.org/hutto07192008.html | | | |
| Ingalsbee, T. 1997. Logging for firefighting: a critical analysis of the Quincy Library Group Fire Protection Plan. Unpublished research paper. http://www.fire-ecology.org/research/logging-for-firefighting_2.htm | SC-02, Opposing Views Attachment #1, page 15. SC-02, Opposing Views Attachment #21, page 1 | Not applicable | This paper is specific to the Quincy Library Group Fire Protection Plan. The Magone Project is not subject to this plan. |
| Ingalsbee, T. 2000. Commercial logging for wildfire prevention: facts vs fantasies. http://www.fire-ecology.org/citizen/logging_and_wildfires.htm | SC-02, Opposing Views Attachment #1, page 15; SC-02, Opposing Views Attachment #3, page 8 | Not relevant to this project | Opinion piece in which the author describes why he believes commercial logging does not prevent wildfires. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. This project does not propose commercial logging to prevent wildfires as part of the purpose and need or included in the proposed action. |
| Ingalsbee, T. 2000. Money to burn: the economics of fire and fuels management, part one: fire suppression. An American Lands Alliance publication. www.fire-ecology.org/research/money_to_burn.html | SC-02, Opposing Views Attachment #3, page 8 | Not applicable | The paper addresses the national fuels program policies and suggested reform. |
| Ingalsbee, T. 2002. Logging without limits isn't a solution to wildfires. Published in the Portland Oregonian, August 6. http://www.klamathforestalliance.org/Documents/loggingwithoutlimits.html | SC-02, Opposing Views Attachment #1, page 16 | Not applicable | Article contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. The author describes those activities he does and does not view as appropriate to fuels reduction. The Magone Project does not propose commercial logging to prevent wildfires. |
| Ingalsbee, T. 2002. National fire plan implementation: Forest Service failing to protect forests and communities. American Lands Alliance, March. http://www.fire-ecology.org/policy/ALA_fire_policy_2002.html | SC-02, Opposing Views Attachment #3, page 9 | Not applicable | This paper discusses national policies that cannot be changed by the Magone Project. |
| Ingalsbee, T. 2002. The wildland fires of 2002 illuminate fundamental questions about our relationship to fire. The Oregon Quarterly, Winter . http://www.fire-ecology.org/research/wildfire_paradox.pdf | SC-02, Opposing Views Attachment #1, page 16. SC-02, Opposing Views Attachment #3, page 9 | Not applicable; unable to open pdf | The citation references the use of commercial logging to reduce "fire hazard." The Magone Project purpose and need does not include a reduction in fire hazard. |
| Ingalsbee, T. 2003. Fanning the flames! The U.S. Forest Service: a fire-dependent bureaucracy. Missoula Independent. 14(24). http://www.fire-ecology.org/research/USFS_fire_dependent.html | SC-02, Opposing Views Attachment #1, page 17; SC-02, Opposing Views Attachment #3, page 10 | Not applicable | Opinion article in a newspaper in which the author discusses his disagreement with Forest Service policies related to fire and forest management. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. Post- |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | fire salvage logging is not part of the purpose and need or included in the proposed action for this project. |
| Ingalsbee, T. 2005. A reporter's guide to wildland fire. Firefighters United for Safety, Ethics, and Ecology. January. http://www.commondreams.org/news2005/0111-14.htm | SC-02, Opposing Views Attachment #1, page 17; SC-02, Opposing Views Attachment #3, page 10 | Not applicable | Not a peer reviewed research paper. This project does not propose commercial logging to prevent wildfires. Slash created through harvest activities would be treated. |
| Ingalsbee, T.; Fox, J. 2006. Torchbearers for a new fire management paradigm. Firefighters United for Safety, Ethics, and Ecology (FUSEE). Poster presentation at Third International Fire Ecology and Management Congress, Association for Fire Ecology. http://fusee.org/docs/AFE_FUSEE_display_abstract.pdf | SC-02, Opposing Views Attachment #3, page 11 | Not applicable | An article that describes an organization and its' charter. |
| Interforest Report. 2000. http://web.archive.org/web/20040202102340/http://klamathtribes.org/forestplan.htm | SC-26, page 8 | Not relevant | Link provided goes to the "Klamath Tribes Forest Management Plan." The Malheur Forest Plan is the guiding document for the Malheur National Forest. |
| Karr, J.R. 2005. Nature doesn't benefit from logging fire-damaged lands. Op-ed Tacoma News Tribune. December 8. http://www.docstoc.com/docs/122585663/nature-doesn%EF%BF%BDt-benefit-from-logging-fire-damaged-lands | SC-02, Opposing Views Attachment #8, page 17 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Karr, J.R.; Frissell, C.A.; Rhodes, J.J. [et al.]. 2002. Excerpt from a letter to the Subcommittee on Forests & Forest Health U.S. House of Representatives. July 3. http://www.nativeforest.org/campaigns/wildfire_info_center/letter_from_beschta.htm | SC-02, Opposing Views Attachment #4, page 7 | Not applicable | The excerpt is from a letter to congress, which states the allegations that the Forest Service may have adopted a policy that does not reverse the ecological effects of roads. This article is not peer-reviewed and is a summary of the Beschta Report presented to Congress. Further, it states generalizations regarding roads and road management by the Forest Service that may or may not be applicable to this project. It does not contain data or analysis however, so observations made in this report may more broadly apply to roads management and other ecological effects. |
| Keene, R. 2011. Restorative logging? More rarity than reality. Guest Viewpoint, the Eugene Register Guard. March 10. http://eugeneweekly.com/2011/03/03/views3.html | SC-02, Opposing Views Attachment #1, page 18; SC-02, Opposing Views Attachment #3, page 12 | Not applicable | This is an opinion piece not a peer reviewed research paper. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Keene, R. 2009. Logging does not prevent wildfires. Guest Viewpoint, the Eugene Register Guard. January 11. http://www.highbeam.com/doc/1G1-192070397.html | SC-02, Opposing Views Attachment #1, page 1; SC-02, Opposing Views Attachment #3, page 11 | Not applicable | This is an opinion piece not a peer reviewed research paper. |
| Keene, R. 1997. Forests, fires, and logging. Oregonian. Op-ed. May 1. http://www.subtleenergies.com/ormus/bmnfa/fire&log.htm | SC-02, Opposing Views Attachment #21, page 4 | Not applicable | This is not scientific peer reviewed literature. This is an opinion piece written for a newspaper. |
| Kelly, S. 2007. Cheap chips, counterfeit wilderness: greenwashing logging on Montana's biggest national forest. World Prout Assembly. http://www.worldproutassembly.org/archives/2007/12/cheap_chips_cou.html | SC-02, Opposing Views Attachment #3, page 12 | Not applicable | This is an opinion piece not a peer reviewed research paper, and pertains to the Bitterroot National Forest Plan draft. |
| Komonen, A. 2003. Hotspots of insect diversity in boreal forests. Conservation Biology, 17(4): 976-981. http://www.jstor.org/stable/3588853?seq=1#page_scan_tab_contents | SC-02, Opposing Views Attachment #5, page 14 | Not applicable | This article pertains to insect diversity within boreal forests in Finland. The Magone Project is not located within a boreal type forest. |
| Korb, J., N.C. Johnson, and W.W. Covington. 2004. Slash pile burning effects on soil biotic and chemical properties and plant establishment: recommendations for ameliorations. Restoration Ecology. 12(1): 52-62. https://nau.edu/uploadedFiles/Academic/CEFNS/NATSCI/SESES/Forms/slashpileburningeffects.pdf | SC-26, page 18 | Limited applicability | This research found that amending burned pile scars with living soil and native herb seeds increased native herb cover and decreased undesirable plant cover two years following pile burning. The authors recommend this technique be adopted. This recommendation is of limited applicability because this possible restoration technique is too new and untested to be required for the Magone Project. |
| Kouki, J.; McCullough, D.G.; Marshall, L.D. 1997. Effect of forest stand and edge characteristics on the vulnerability of jack pine stands to jack pine budworm (*Choristoneura pinus pinus*) damage. Canadian Journal of Forest Research, 27(11): 1765-1772. http://www.nrcresearchpress.com/doi/abs/10.1139/x97-149#.VVPmt5gcSic | SC-02, Opposing Views Attachment #1, page 3 | Not applicable | This article relates to Lake States area jack pine budworm and jack pine stand dynamics specifically. The authors state that "Although our data are very accurate and based on field inventory, this does not justify generalizations of the results beyond the area studied." |
| Kulakowski, D. 2010. Testimony before the subcommittee on public lands and forests of the energy and natural resources committee of the United States. http://energy.senate.gov/public/files/kulakowskitestimonyon s2798042110.pdf | SC-02, Opposing Views Attachment #5, page 18 | Unable to locate document | The website link provided does not work. Unable to locate reference. |
| Laverty, L. 2000. USDA Forest Service and Tim Hartzell U.S. Department of the Interior: a report to the President | SC-02, Opposing Views Attachment #1, page | Not applicable | This report recommends how best to respond to the year 2000 wildfires, reduce the impacts of these |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| in response to the wildfires of 2000. September 8. http://frames.nacse.org/6000/6269.html | 20; SC-02, Opposing Views Attachment #3, page 13 | | wildland fires on rural communities, and ensure sufficient firefighting resources in the future. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. The report goes on to clarify further that without adequate treatment of small woody material, logging may exacerbate fire risk rather than lowering it. Slash created through harvest activities would be treated. |
| Lawrence, N. 2001. Gridlock on the National Forests. Testimony before the U.S. House of Representatives Subcommittee on Forests and Forest Health (Committee on Resources) December 4. http://www.nrdc.org/land/forests/tnl1201.asp | SC-02, Opposing Views Attachment #1, page 2; SC-02, Opposing Views Attachment #3, page 1; SC-02, Opposing Views Attachment #21, page 2 | Not applicable | This non-scientific paper discusses thinning for fire risk reduction and post-fire salvage logging. The Magone Project does not propose post-fire salvage. The project proposes silviculture treatments to restore forest structure, composition, and density. |
| Leitner, B. 2003. Logging companies are responsible for the California wildfires. The Democratic Underground. October 30. http://www.democraticunderground.com/articles/03/10/30_logging.html | SC-02, Opposing Views Attachment #1, page 21; SC-02, Opposing Views Attachment #3, page 14 | Not applicable | The article contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Logan, J.A., and J.A. Powell. 2001. Ghost forests, global warming and the mountain pine beetle. American Entomologist. Fallll. http://www.math.usu.edu/powell/phenol/feature-logan.pdf | SC-02, Opposing Views Attachment #5, page 18 | Consistent with project | This article discusses the life cycle of mountain pine beetle and its role as an ecological component of western pine forests. |
| Long, R.D. 2001. U.S. Department of Agriculture Office of Inspector General. Western Region Audit Report: Forest Service National Fire Plan Implementation. Report No. 08601-26-SF. November. http://www.usda.gov/oig/webdocs/08601-26-SF.pdf | SC-02, Opposing Views Attachment #1, page 22 | Not applicable | This report presents the results of the Inspector General's 2001 review of the Forest Service's implementation of the National Fire Plan. |
| Mamashealth.com. Rotting wood and how it affects the environment. http://www.mamashealth.com/saveearth | SC-02, Opposing Views Attachment #8, page 10 | Not applicable | This is not scientific peer reviewed literature. |
| Mann, C.C.; Plummer, M.L. 1999. Call for "sustainability" in forests sparks a fire. Science. 283(5410): 1996-1998. http://www.sciencemag.org/content/283/5410/1996.summary | SC-02, Opposing Views Attachment #1, page 22 | Not applicable | This article summarized the process (as of 1999) that a committee of scientists went through to prepare a report with recommendations to the Forest Service for updating the National Forest Management Act by incorporating them into upcoming draft regulations not specific to the Magone Project. The Forest Service will continue to follow all laws as mandated, including the Multiple- |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | Use Sustained-Yield Act and the National Forest Management Act. |
| Mark, J. 2009. Mission impossible. Earth Island Journal. Winter. http://www.earthisland.org/journal/index.php/eij/article/mission_impossible/ | SC-02, Opposing Views Attachment #8, page 7 | Not applicable | This is not scientific peer reviewed literature. |
| Martinez, Lori. 2000. Applications of tree-ring dating. University of Arizona. http://www.ltrr.arizona.edu/lorim/apps.html | SC-02, Opposing Views Attachment #8, page 8 | Not applicable | This is not scientific peer reviewed literature. |
| Martinson, E.J., and P.N. Omi. 2013. Fuel treatments and fire severity: a meta-analysis. Res. Pap. RMRS-RP-103WWW. Fort Collins, CO: USDA Forest Service, Rocky Mountain Research Station. 35 p. https://www.firescience.gov/projects/08-2-1-09/project/08-2-1-09_RMRS-RP-103WWW.pdf | SC-26, page 14 | Consistent with analysis | This document is a meta-analysis looking at the effects of fuel treatments on fire intensity and severity. The study found that treated stands generally experienced a reduction in canopy volume scorch, a reduction in scorch height. However, the study also found that fuel treatments vary widely in effectiveness. Treatments were shown to be most effectively in grasslands and in conifer forests that were heavily thinned and subsequently burned. Thin-only treatments were also shown to moderate fire responses despite the addition of slash fuels in many cases. The study showed that the best available predictor of the effectiveness of surface reduction treatments was residual tree diameter.<br>This study states that its meta-analysis adds empirical support for the basic principles of fuels management proposed by Agee and Skinner (2005), which is cited in the Magone Fire, Fuels, and Air Quality Report and DEIS. The Magone Project proposes a combination of thinning followed by prescribed burning. |
| Mitchell, S.R., E. Harmon, and K.E.B. O'Connell. 2009. Forest fuel reduction alters fire severity and long-term carbon storage in three Pacific Northwest ecosystems. Ecological Applications. 19(3): 643-655. http://www.fs.fed.us/pnw/pubs/journals/pnw_2009_mitchell001.pdf | SC-26, page 20 | Consistent with project | This article looks at the trade-off between 1) reducing fuel (and carbon sequestration) that has accumulated from fire suppression and led to extreme fire risk in some areas, and 2) manage forests for enhanced carbon sequestration as a method of reducing atmospheric CO2 and associated threats from global climate change. The study looked at the east Cascades ponderosa pine forests, west Cascades western hemlock-Douglas-fir forests, and Coast Range western hemlock-Sitka |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | Spruce forests. Simulations showed that fuel reduction treatments in these ecosystems reduced fire severity consistently. They also showed that fuel reduction treatments reduced carbon sequestration more than a wildfire would. The study recommends that balancing a demand for maximum landscape carbon storage with the demand for reduced wildfire severity will require treatments to be applied strategically throughout the landscape.<br>The only study area looked at in this article that is similar to the Magone project planning area is the east Cascades ponderosa pine forests. However, the project is consistent with the recommendations of the article, as treatments are proposed strategically throughout the planning area, and not proposed indiscriminately for all stands. |
| More large forest fires linked to climate change. 2006. Adapted from materials provided by the University of Arizona. ScienceDaily. July 10.<br>http://www.sciencedaily.com/releases/2006/07/060710084004.htm | SC-02, Opposing Views Attachment #3, page 14 | Provides background information | Article discusses the relationship between climate and large, severe wildfires and fire exclusion. The Magone Project would reduce fuel loading by reducing the density of standing vegetation, surface fuels, and ladder fuels. Fuel is the only element of fire behavior that is manageable as climate and topography are beyond our control. |
| Morgan, P.; Heyerdahl, E.K.; Gibson, C.E. 2008. Multi-season climate synchronized forest fires throughout the 20th century, Northern Rockies. Ecology 89(3): 717-728.<br>http://www.firelab.org/index.php?option=com_jombib&task=showbib&id=343 | SC-02, Opposing Views Attachment #3, page 15 | Not applicable | Paper discusses climatic effects as related to large, severe wildfires in the Northern Rockies. |
| Naeem, S.; Chapin, F.S., III; Costanza, R. [et al.]. 1999. Biodiversity and ecosystem functioning: maintaining natural life support processes. Issues in Ecology. 4.<br>http://www.esa.org/science_resources/issues/TextIssues/issue4.php | SC-02, Opposing Views Attachment #1, page 24 | General information; not used | This report provides an overview of ecosystem functioning, reviews the distinction between taxonomic biodiversity and functional diversity, and evaluates the current status of research concerning ecosystem responses to changes in diversity.<br>The Magone Project DEIS analyzes potential direct, indirect, and cumulative effects on multiple resources, including wildlife species, fish species, and forest vegetation species. The project does not propose to extirpate any native species from the planning area. |
| Naficy, C., A. Sala, E.G. Keeling, J. Graham, and T.H. | SC-26, page 18 | Consistent with | The article discusses areas of past logging being |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| DeLuca. 2010. Interactive effects of historical logging and fie exclusion on ponderosa pine forest structure in the Northern Rockies. Ecological Applications. 20:1851-1864. http://rintintin.colorado.edu/~cana4848/papers/Naficy_et_al_2010_Ecol_App.pdf | | literature used in this analysis | more homogeneous, having a higher stand density, with an increased abundance of fire-intolerant species. The Magone Project would thin those more fire-intolerant species in many of the areas that have previously been logged and fire excluded to return, to a more historical species composition and density. |
| Nappi, A. [et al.]. 2003. Snag use by foraging black-backed woodpeckers (*Picoides articus*) in a recently burned eastern boreal forest. The Auk. 120 (2): 505-511. http://www.borealcanada.ca/research_arc_hot_e.cfm | SC-02, Opposing Views Attachment #8, page 9 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| National forest fact sheet: myths and facts of logging national forests. https://www.yumpu.com/en/document/view/34731096/the-us-timber-industry | SC-02, Opposing Views Attachment #21, page 5 | Not applicable | This is not scientific peer reviewed literature. This writing is from a private citizen advocacy organization doing their specific outreach. |
| Nebeker. 1989. | SC-02, Opposing Views Attachment #5, page 13 | Unable to locate reference | Unable to locate the article based on the citation given. |
| Noss, R.F., J.F. Franklin, W.L. Baker, T. Schoennagel, and P.B. Moyle. 2006. Managing fire-prone forest in the western United States. Frontiers in Ecology and the Environment. 4(9): 481-487. http://spot.colorado.edu/~schoenna/images/Nossetal2006Frontiers.pdf | SC-26, page 8 | Consistent with project | This article is a review looking at the management of fire-prone forests (particularly in the west), and states that although vegetation and wildlife in these forests are adapted to fire the historical range of fire frequency and severity was huge. The article recommends that restoration and management of fire-prone forests should be precautionary, mimic natural fire regimes as much as possible, and avoid intensive practices (e.g., post-fire logging and planting).<br>The Magone Project would move the planning area towards the historical range of variability, mimic natural fire regimes as much as possible, and would not include post-fire logging or planting. |
| Okoand Ilan Kayatsky, D. 2002. Fight Fire with Logging? Mother Jones. August 1. http://motherjones.com/politics/2002/08/fight-fire-logging | SC-02, Opposing Views Attachment #1, page 27; SC-02, Opposing Views Attachment #3, page 16 | Not applicable | This is a news article/opinion piece critical of the National Fire Plan of 2002. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Olmstead, S.; Kousky, C.; Sedjo, R. 2013. Final Report to the Joint Fire Science Program Wildland Fire Suppression and Land Development in the Wildland/Urban Interface. http://www.firescience.gov/projects/10-3-01-33/project/10- | SC-26, page 19 | Limited applicability | This document looks at the hypothesis that public fire suppression in fire-prone areas acts as a subsidy to landowners, incentivizing the conversion of land to residential and commercial development |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| 3-01-33_final_report.pdf | | | since landowners do not bear the full cost of their choice to build on land in fire-prone areas.<br>The Magone Project proposes a combination of silviculture and fuels treatments, some of which are located in the wildland-urban interface along the Forest boundary, around the popular Magone Lake recreation area, and along escape corridors from Magone Lake in the Grant County Community Fire Protection Plan. These treatments are not proposed solely to reduce fuels in a wildland-urban interface, but also to move the area toward the historical range of variability for structural stages, reduce stand density, and shift the area towards more historical species composition given the historical fire regime. |
| Ontario aviation and forest fire management. Fact sheet: understanding fire and fire behavior.<br>http://www.emifpa.org/pdf/factsheetunderstandingfire.pdf | SC-02, Opposing Views Attachment #11, page 2 | Not applicable | This is not scientific peer reviewed literature. The quote the commenter uses does not appear on this page. This is an outreach site offering homeowners services regarding wildfire. |
| Oregon State University Research. 2009. Science Centric. July 9.<br>http://www.sciencecentric.com/news/article.php?q=09070918-forest-fire-prevention-efforts-will-lessen-carbon-sequestration-add-greenhouse-warming | SC-02, Opposing Views Attachment #3, page 16 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Oregon Wild. Restoring eastern Oregon's dry forests: a practical guide for ecological restoration.<br>http://www.oregonwild.org/sites/default/files/pdf-files/Eastside_Restoration_Handbook.pdf | SC-26, page 15 | Provides general background information. | This is not scientific peer reviewed literature. However, there are many parts of the pamphlet that are applicable to the activities planned within the project planning area. |
| O'Toole, R. Incentives, not fuels, are the problem. Published by the Thoreau Institute.<br>http://www.ti.org/fireshort.html | SC-02, Opposing Views Attachment #3, page 16 | Not applicable | This is an opinion piece discussing fire suppression. |
| O'Toole, R. 2002. Reforming the fire service: an analysis of federal fire budgets and incentives. The Thoreau Institute.<br>www.ti.org/firesvc.pdf | SC-02, Opposing Views Attachment #3, page 17. | Not applicable | This is an opinion piece discussing the National Fire Plan. |
| O'Toole, R. Money to Burn? Regulation. Winter 2002–2003.<br>http://object.cato.org/sites/cato.org/files/serials/files/regulation/2002/12/v25n4-6.pdf | SC-02, Opposing Views Attachment #3, page 17 | Not applicable | This opinion piece discusses the history of the Forest Service spending on fuels treatments. The author proposes systematic reform of the Forest Service that would fund each national forest out of |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | its own receipts; land managers would decide which combination of thinning, prescribed burnings, and fire suppression is most appropriate to local needs and resource values. |
| Partridge, A. 1998. Statement at a press conference with Senator Robert Torricelli about S. 977 and HR 1376: the Act to Save America's Forests, U.S. Capitol. April 28. http://www.saveamericasforests.org/news/ScientistsStatement.htm | SC-02, Opposing Views Attachment #1, page 49; SC-02, Opposing Views Attachment #21, page 6 | No applicable | This document includes statements from scientists supporting the Act to Save America's Forest (S. 977, HR 1376). It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Partridge, A. 2003. Testimony to the Agriculture, Nutrition and Forestry Committee, United State Senate. Hearing to Review Healthy Forests Restoration Act, HR 1904. June 26. http://www.univision.co.za/offer-day-oA2A392Cr1N3B2x_2F2du3g3-music.shtml | SC-02, Opposing Views Attachment #3, pages 17-18 | Not applicable | This is a transcript from a committee hearing on the Healthy Forest Restoration Act (HFRA) in 2003. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. The Magone Project is not a HFRA project. |
| Perry, D. 1994. Testimony at a senate field hearing on forest health. August 29. http://www.subtleenergies.com/ormus/Fire/D_PERRY.htm | SC-02, Opposing Views Attachment #5, page 9 | Not applicable | This is not scientific peer reviewed literature. |
| Peters, R.L.; Frost, E.; Pace, F. 1996. Managing for forest ecosystem health: a reassessment of the forest health crisis. Defenders of Wildlife. April. | SC-02, Opposing Views Attachment #3, page 18; SC-02, Opposing Views Attachment #21, pages 2-3 | Provides general background information | This publication notes that fire, insects, and disease are the drivers of forest diversity, structure and function. This project proposes activities to restore forest structure, composition, and density toward more resistant and resilient vegetative conditions given the historic fire regime. |
| Peterson, M. 2003. Testimony to the Senate Agriculture, Nutrition, and Forestry Committee concerning the Healthy Forests Restoration Act, HR 1904. June 26. | SC-02, Opposing Views Attachment #3, pages 18-19 | Not applicable | This is a transcript from a committee hearing on the Healthy Forest Restoration Act (HFRA) in 2003. It is not scientific, peer-reviewed literature. The Magone Project is not a HFRA project. |
| Platt, R.V.; Veblen, T.T.; Sherriff, R.L. 2006. Are wildfire mitigation and restoration of historic forest structure compatible? A spatial modeling assessment. Annals of the Association of American Geographers. 96(3): 455-470. http://www.ingentaconnect.com/content/routledg/anna/2006/00000096/00000003/art00001 | SC-02, Opposing Views Attachment #1, page 27; SC-02, Opposing Views Attachment #3, page 19; SC-02, Opposing Views Attachment #21, page 1 | Consistent with literature used in this analysis | This study evaluates where both wildfire mitigation and restoration of historic forest structure are potentially needed in the ponderosa pine-dominated montane forest zone of Boulder County, Colorado. This study questions the validity of thinning as a means both to reduce the threat of wildfire and to restore historic forest structure.<br>This paper found that in the lower elevations of this study, below approximately 6,900 feet where a frequent fire regime historically existed, thinning is needed to both mitigate wildfire risk and restore historical forest structure. This finding is consistent |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | with literature used to develop the proposed action. |
| Powell, D.S.; Faulkner, J.L.; Darr, D.R. [et al.]. 1992. Forest resources of the United States. Gen. Tech. Rep. GTR-RM-234. Fort Collins, CO: USDA Forest Service, Rocky Mountain Forest and Range Experiment Station. http://www.fs.fed.us/rm/pubs_rm/rm_gtr234.html | SC-02, Opposing Views Attachment #1, page 28 | Relevant to this project | This General Technical Report summarizes the forest resources in the United States in 1992. From the Introduction: "As required by the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA), this report updates information on the Nation's forest resource, particularly the timber resource." This report is a data compilation and summary, and does not provide opinions or options for forest management.<br>Proposed units are located on lands suitable for timber production. |
| Power, T. 2000. The politics of forest fires—the abuse of other people's hard times. August 15.<br>http://www.forwolves.org/ralph/tompower.htm | SC-02, Opposing Views Attachment #3, page 20; SC-02, Opposing Views Attachment #21, page 5 | Not applicable | This is an opinion piece discussing commercial logging. |
| Raven, P. 2001. February 9 letter to Senator Jean Carnahan.<br>http://www.saveamericasforests.org/Raven.htm | SC-02, Opposing Views Attachment #1, page 29 | Not applicable | This citation is from a letter that supported the 2001 proposed Act to Save America's Forests Legislation. According to the letter, the Act would have ended logging in all the remaining Northwest Ancient Forests, ended logging in all remaining roadless forests, and ended logging in "special" forest areas throughout the federal forest system, such as the giant Sequoia forests in California. In addition, the Act would have banned clearcutting in the national forests. The proposed legislation did not become law. Thus, this article is not relevant to the site-specific Magone Project analysis. |
| Raven, P.; Goodall, J.; Wilson, E.O., and over 600 leading biologists, ecologists, foresters, and scientists from other forest specialties. From a 1998 letter to congress.<br>http://www.saveamericasforests.org/resources/Scientists.htm | SC-02, Opposing Views Attachment #1, page 29 | Not applicable | This was from a letter to Congress signed by over 600 scientists urging passage of the Act to Save America's Forests, not directly referencing the Magone Project. They state that clearcutting and other even-aged silvicultural practices and timber road construction have caused widespread forest ecosystem fragmentation and degradation. This proposed legislation did not become law. Thus, this article is not relevant to the site-specific Magone Project analysis. |
| Reice, S. 1998. Press conference with Senator Robert Torricelli. April 28. | SC-02, Opposing Views Attachment #8, page 9 | Not applicable | This is not scientific peer reviewed literature. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| http://www.saveamericasforests.org/news/ScientistsStatement.htm | | | |
| Reinhardt, E.D.; Keane, R.E.; Calkin, D.E.; Cohen, J.D. 2008. Objectives and considerations for wildland fuel treatment in forested ecosystems of the interior western United States. Forest Ecology and Management. 256(12): 1997-2006. http://www.firewise.org/infomration/research-and-guidance/WUI-HOME-Ignition-Research/~/media/firewise/files/pdfs/research/cohenfueltreatment.pdf | SC-02, Opposing Views Attachment #11, pages 10-12 | Consistent with analysis | The overall purpose of this project is to restore forest resiliency by reestablishing and restoring forest structure and pattern, vegetation composition and diversity, and riparian communities to conditions that are more resilient to natural disturbance processes, including wildfire. Some of the opposing views focus on home ignitability, which is outside the scope of this project. |
| Roberson, E.B. Excerpt from a letter to Chief Dale Bosworth and 5 members of congress. http://www.plantsocieties.org/PDFs/Fire%20letter%20CNPS%208.02%20letterhead.pdf | SC-02, Opposing Views Attachment #1, page 30; SC-02, Opposing Views Attachment #3, page 20; SC-02, Opposing Views Attachment #21, page 3 | Not applicable | Historical logging practices were based on entirely different management objectives and are a poor indicator of the effects of modern federal forestry practices focused on current, science-based restoration principles. DEIS Chapter 3 describes impacts to individual resources. |
| Roland, J. 1993. Large-scale forest fragmentation increased the duration of tent caterpillar outbreak. Oecologia. 93: 25-30. http://download.springer.com/static/pdf/217/art%253A10.1007%252FBF00321186.pdf?auth66=1425923849_055f22b69ac5105c36225284a235d71c&ext=.pdf | SC-02, Opposing Views Attachment #1, page 3 | Not applicable | Article documents outbreaks of forest tent caterpillar in the boreal mixed-wood forest in Ontario, Canada. The Magone project planning area is not located in a boreal mixed-wood forest, therefore this research is not applicable to the project planning area. |
| Romme, W.H. [et al.]. 2006. Recent forest insect outbreaks and fire risk in Colorado forests: a brief synthesis of relevant research. http://warnercnr.colostate.edu/docs/frs/cfri/cfri_insect.pdf | SC-02, Opposing Views Attachment #5, page 12 | Limited applicability | Dense lodgepole pine is naturally occurring and fire-adapted (needing fire for reseeding). Ponderosa pine forests have become unnaturally dense with fire suppression activities, and fire intolerant species are encroaching on what used to be very open stands of ponderosa pine with frequent fire return intervals. This article discussed the possibility of climate change as well as increased stand density as possible compounding effects leading to larger fires. Most of the article is focused on lodgepole. The Magone project planning area has a very small percent of lodgepole in its species diversity. |
| Romme, W.H.; Knight, D.H.; Yavitt, J.B. 1986. Mountain pine beetle outbreaks in the Rocky Mountains—regulators of primary productivity. American Naturalist. 127: 484-494. http://www.jstor.org/stable/2461578?seq=1#page_scan_ta | SC-02, Opposing Views Attachment #5, page 12 | Limited applicability | This article discusses beetles as regulators of lodgepole pine productivity. The Magone project area has very little lodgepole. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| b_contents | | | |
| Rothman, L.; Roland J. 1998. Forest fragmentation and colony performance of forest tent caterpillar. Ecography. 21: 383–<br>391.<br>http://www.jstor.org/stable/3683173?seq=1#page_scan_tab_contents | SC-02, Opposing Views Attachment #1, page 3 | Limited applicability | The article discusses forest fragmentation and the possibility that fragmentation and reduced canopy cover may increase the persistence of some insects that cause mortality in trees. Our goal with this project is to prevent fragmentation for some species and to create small openings in other areas to increase habitat for other species, especially in areas that have been experiencing encroachment of fire intolerant species. |
| Schneider, G. 2008. Dead trees (they're still full of life!). Macphail Woods Ecological Forestry Project.<br>http://www.macphailwoods.org/wildlife/deadtrees.html | SC-02, Opposing Views Attachment #8, page 11; SC-02, Opposing Views Attachment #14, pages 6-7 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Schowalter, T. 1997. Insects epidemics a natural path to forest health. OSU News. May 27.<br>http://oregonstate.edu/ua/ncs/archives/1997/may/insect-epidemics-natural-path-forest-health | SC-02, Opposing Views Attachment #5, page 10 | Relevant to project | The article states that insects are a clear indicator of forest health. Fire exclusion allowed encroachment of understory shrub and fire intolerant tree species in the project planning area. The actions proposed in the Magone Project have been developed to move the area back to previous conditions. |
| Schowalter. 1989. Canopy arthropod community structure and herbivory in old growth and regenerating forests in western Oregon. Can. J. Fore. Res. 19: 318-322.<br>http://www.nrcresearchpress.com/doi/pdf/10.1139/x89-047 | SC-02, Opposing Views Attachment #1, page 3 | Not applicable | Article discusses arthropod community structure and herbivory in the forests of western Oregon. The Magone Project is located in eastern Oregon. |
| Schowalter and Means. 1989. | SC-02, Opposing Views Attachment #1, page 3 | Unable to locate reference | Unable to locate reference based on the citation given. |
| Science Buzz. 2007. Rising from the ashes: forest fires give way to new growth. May.<br>http://www.sciencebuzz.org/blog/rising_from_the_ashes_forest_fires_give_way_to_new_growth | SC-02, Opposing Views Attachment #8, page 10 | Not applicable | This is not scientific peer reviewed literature. |
| Shoemaker, J. 2010. Landsat reveal surprising connections between beetle attacks, wildfire. NASA. September 8.<br>http://landsat.gsfc.nasa.gov/?p=616 | SC-02, Opposing Views Attachment #5, pages 20-21 | Limited applicability | Mountain pine beetle attacks, while occurring on the Forest, are not a large part of the Magone project planning area because lodgepole pine is not a large percentage of the forest vegetation. |
| Short, B.; Hardy-Short, D.C. 2003. Physicians of the forest: a rhetorical critique of the Bush Healthy Forest | SC-02, Opposing Views Attachment #1, page 33 | Not applicable | This opinion piece discusses the federal fire policy known as the Healthy Forest Initiative that emerged |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Initiative. Electronic Green Journal. Issue 19. http://escholarship.org/uc/item/4288f8j5 | | | out of the 2002 fire season. The Magone project is not a part of the Healthy Forest Initiative. |
| Sierra Club. 2005. Ending commercial logging on public lands. http://northcarolina.sierraclub.org/pisgah/conservation/ecl.html | SC-02, Opposing Views Attachment #1, page 33 | Not applicable | This is a statement from a non-profit advocacy website. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. The Magone Project implements Malheur Forest Plan direction. |
| Simard, M.; Romme, W.H.; Griffin, J.M.; Turner, M.G. 2011. Do mountain pine beetle outbreaks change the probability of active crown fire in lodgepole pine forests? Ecological Monographs. 81(1): 3-24. http://www.jstor.org/stable/23047063?seq=1#page_scan_tab_contents | SC-02, Opposing Views Attachment #17, page 1 | Not applicable | Not part of the purpose and need for the Magone Project. |
| Stahl, A. 2003. Reducing the threat of catastrophic wildfire to central Oregon communities and the surrounding environment. Testimony before the House Committee on Resources, August 25. http://www.propertyrightsresearch.org/2004/articles6/testimony_of_andy_stahl.htm | SC-02, Opposing Views Attachment #1, page 34 | Not applicable | This is a transcript of testimony provided during a hearing before the House Committee on Resources in 2003. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Steeger [et al.]. 1998. | SC-02, Opposing Views Attachment #5, page 13 | Unable to locate reference | |
| Stine, P., P. Hessburg, T. Spies, M. Kramer, C.J. Fettig, A. Hansen, J. Lehmkuhl, K. O'Hara, K. Polivka, P. Singleton, S. Charnley, A. Merschel, and R. White. 2014. The ecology and management of moist mixed-conifer forests in eastern Oregon and Washington: a synthesis of the relevant biophysical science and implications for future land management. Gen. Tech. Rep. PNW-GTR-897. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 254 p. | SC-26, page 8 | Consistent with project | Stine et al. (2014) reviewed the literature on the ecology of moist mixed conifer forests in eastern Oregon and Washington. Commenter cites article in the more general concept of restoring forest processes, not just structure. This is consistent with the Magone Project. |
| Strickler, K.; Hermach, T.G. 2003. Liar, liar, forests on fire: why forest management exacerbates loss of lives and property. CommonDreams.org. October 31. http://www.commondreams.org/scriptfiles/views03/1031-10.htm | SC-02, Opposing Views Attachment #1, page 35; SC-02, Opposing Views Attachment #3, page 21 | Not applicable | This is from a non-profit advocacy website discussing the author's opposition to the Healthy Forest Restoration Act (HFRA). It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. The Magone Project is not a HFRA project. |
| Talbert, C., and D. Marshall. 2005. Plantation productivity in the Douglas-fir region under intensive silviculture practices: results from research and operations. *Journal of* | SC-26, page 5 | Not applicable | This article reviews plantation silvicultural practices used in the west side Douglas-fir region of Oregon and Washington. The Magone project planning |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| *Forestry*. 103(2): 65-70. http://www.treesearch.fs.fed.us/pubs/24914 | | | area is located in eastern Oregon and is dominated by a different vegetation type and the Magone Project does not propose to manage plantations. |
| Tanner, G.W.; Marion, W.R.; Mullahey, J.J. 1991. Understanding fire: nature's land management tool. Florida Cooperative Extension Service. July. http://edistt.ifas.ufl.edu/pdffiles/UW/UW12400.pdf | SC-02, Opposing Views Attachment #8, page 12 | Not applicable | Study focuses on species found in Florida. |
| Taxpayers for Common Sense. 2000. From the ashes: reducing the harmful effects and rising costs of western wildfires. Washington DC. December. http://www.ourforests.org/fact/ashes.pdf | SC-02, Opposing Views Attachment #1, page 36; SC-02, Opposing Views Attachment #3, page 22 | Not applicable | This report discusses Forest Service use of tax dollars to fight wildfires and Congressional funding of the Forest Service. It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Thomas, C. 2007. Living with risk: homeowners face the responsibility and challenge of developing defenses against wildfires. Sacramento Bee. July 1. http://www.sierraforestlegacy.org/NR_InTheNews/SFLIP_2007-07-01_SacramentoBee.php | SC-02, Opposing Views Attachment #1, page 36; SC-02, Opposing Views Attachment #3, page 22 | Not applicable | This is an opinion piece focusing on protecting homes from wildfire near Lake Tahoe and encourages residents to implement defensible space around their homes. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. |
| Thompson Memorial Lecture. What is the wildland fire threat to homes? April 10. 2000. http://www.fs.fed.us/rm/pubs_other/rmrs_2000_cohen_j003.pdf | SC-02, Opposing Views Attachment #11, pages 7-8 | Not applicable | This article discusses the ignitability of homes. |
| Thoughts on the wildland-urban interface fire problem. June 2003. http://firewise.org/~/media/Firewise/Files/Pdfs/Research/CohenThoughtsOnWUI.pdf | SC-02, Opposing Views Attachment #11, page 6 | Not applicable | This letter talks about home ignitability and home ignition zones. |
| Tinker, D.B. [et al.]. 2010. Reciprocal interactions between bark beetles and wildfire in subalpine forests: landscape patterns and the risk of high-severity fire. Research paper sponsored by the Joint Fire Science Program. http://landscape.Zoology.wisc.edu/October%202009%20updates/JFSP_FnlRep_30Sept2009.pdf | SC-02, Opposing Views Attachment #5, page 22 | Not applicable | Article discusses the relationship between bark beetle outbreaks and wildfire. |
| Torgerson [et al.]. 1990. | SC-02, Opposing Views Attachment #5, page 14 | Unable to locate reference | |
| Umpqua National Forest, Diamond Lake Ranger District. 2010. Lemolo Pine Health Maintenance Burn Project scoping notice. June 1. | SC-26, page 11 | Limited applicability | This references the effects of a different project on a different Forest implemented 15-20 years ago. See Level and Effects of Silviculture Treatments and Fire, Fuels, and Air Quality sections in the |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | Magone DEIS for the effects analyses of alternatives 2, 3, and 4. |
| Van Pelt, R. 2008. Identifying old trees and forests in eastern Washington. Washington Department of Natural Resources. http://www.dnr.wa.gov/Publications/lm_hcp_east_old_growth_hires_part01.pdf | SC-26, page 17 | Consistent with project | This guide is referenced to encourage the agency to retain old-growth juniper, pine, larch, Douglas-fir, and other species even if they are less than 21 inches DBH.<br>Much of the Magone project planning area has been previously logged. In areas where no larger trees exist, we would be leaving the largest, with the most old growth characteristics or the appearance of being a legacy tree as part of our planned activities. |
| Vernetti, T. 2005. Are you wildfire aware?<br>http://googobits.com/articles/p0-547-are-you-wildfire-aware.html | SC-02, Opposing Views Attachment #8, page 12 | Not applicable | This is not scientific peer reviewed literature. |
| Voss, R. 2002. Getting burned by logging. The Baltimore Chronicle. July.<br>http://www.baltimorechronicle.com/firelies_jul02.shtml | SC-02, Opposing Views Attachment #1, page 37; SC-02, Opposing Views Attachment #3, page 24; SC-02, Opposing Views Attachment #8, page 13. | Not applicable | This is from a 2003 opinion piece in a newspaper promoting to end commercial logging on national forests through HR1494, the National Forest Protection and Restoration Act. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. |
| Walsh, J. 2010. Scientist: money to fight beetles as fire mitigation not productive. Durango Herald. April 23.<br>http://durangoherald.com/sections/News/2010/04/23/Scientist_Money_to_fight_beetles_as_fire_mitigation_not_productive/ | SC-02, Opposing Views Attachment #3, page 24 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Wilderness Society. 2003. Dead trees and healthy forests: Is fire always bad? March.<br>http://www.wildfirelessons.net/documents/dead-trees-and-healthy-forests.pdf | SC-02, Opposing Views Attachment #8, page 3 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Wildfire in British Columbia. BC Forest Facts. September 2003.<br>http://www.llbc.leg.bc.ca/public/pubdocs/bcdocs/364421/wildfire_bc.pdf | SC-02, Opposing Views Attachment #8, page 13 | Consistent with analysis | This article discusses the benefits of managing fire on the landscape with both planned and unplanned ignitions as conditions allow. |
| Wood [et al.]. 1985. | SC-02, Opposing Views Attachment #5, page 13 | Unable to locate reference | |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| William, L.B. and J.J. Rhodes. 2008. Fire probability, fuel treatment effectiveness and ecological tradeoffs in Western U.S. public forests. The Open Forest Science Journal. 1(7): 1-7. http://www.energyjustice.net/files/biomass/library/Rhodes-Baker.pdf | SC-26, page 14 | Consistent with analysis | This study looked at the probability that fuels treatments will be affected by fire during the period when fuels have been reduced, and the risk of higher severity fire occurring in watersheds if fuels are not treated. The study results indicate that high-severity fire is not inevitable in untreated areas. Where site-specific data on fire probabilities exist, the framework can be used to help locate treatments where they are most likely to encounter higher severity fire. The document also states that it is important to look at the aquatic tradeoffs associated with fuels treatments. |
| Wuerthner, G. 2008. Ecological differences between logging and wildfire. http://wuerthner.blogspot.com/2008/12/ecological-differences-between-logging.html | SC-02, Opposing Views Attachment #4, page 36 | Not applicable | This blog is an opinion piece about the differences between logging and wildfire. We agree that there are differences between the effects of logging and wildfire. However, the Magone Project does not claim to reduce the potential for large wildfires. |
| Wuerthner, G. 2008. Logging, thinning would not curtail wildfires. The Eugene Register Guard. December 26. http://wuerthner.blogspot.com/2008/12/logging-thinning-would-not-curtail.html | SC-02, Opposing Views Attachment #1, page 38; SC-02, Opposing Views Attachment #3, page 25; SC-02, Opposing Views Attachment #8, page 14 | Not applicable | This is an opinion blog discussing the author's view that logging and thinning does not limit wildfires. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. |
| Wuerthner, G. 2009. Who will speak for the forests? NewWest. January 27. http://www.newwest.net/topic/article/who_will_speak_for_the_forests/C564/L564/ | SC-02, Opposing Views Attachment #1, page 38 | Not applicable | This is an opinion blog discussing the author's opposition to the Blackfoot Clearwater Stewardship Proposal and its proposed logging. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. The Magone Project contains design criteria to minimize potential impacts. |
| Wuerthner, G. 2010. Forest Service misses education opportunity. NewWest. June. http://www.newwest.net/topic/article/elliston_face_is_yet_another_example_of_forest_service_malfeasance/C564/L564/ | SC-02, Opposing Views Attachment #3, page 26 | Not applicable | This is an opinion blog discussing the author's opposition to the Elliston Face project in Montana and its proposed logging. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. |
| Wuerthner, G. 2010. Pine beetle fears misplaced. Helena Independent Record. March 25. http://helenair.com/news/opinion/article_f3d671f0-37c9-11df-921d-001cc4c002e0.html | SC-02, Opposing Views Attachment #3, pages 26-27; SC-02, Opposing Views Attachment #5, | Not applicable | This is an opinion piece on the relationship between dead trees and the risk of large fires. The Magone Project purpose and need does not include a reduction in the risk of wildfire. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | page 22 | | |
| Wuerthner, G. 2010. Pine beetles are accomplished ecosystem engineers. Bozeman Daily Chronicle. March 29. http://bozemandailychronicle.com/opinions/guest_columnists/article_bf43fc58-3ac3-11df-aa79-001cc4c03286.html | SC-02, Opposing Views Attachment #17, page 7 | Not applicable | This is not scientific peer reviewed literature. This is an opinion piece written for a newspaper. |
| Wuerthner, G. 2012. Why are conservation groups advocating logging public forests? Counterpunch. September 27. http://www.counterpunch.org/2012/09/27/why-are-conservation-groups-advocating-logging-public-forests/ | SC-02, Opposing Views Attachment #1, page 52 | Not applicable | This is an opinion piece discussing the author's thoughts on conservation groups advocating for logging on public lands. |
| Wuerthner, G. 2014. Why thinning forests is poor wildfire strategy. Wildlife News. January 27. http://www.thewildlifenews.com/2014/01/27/why-thinning-forests-is-poor-wildfire-strategy/ | SC-02, Opposing Views Attachment #3, page 27 | Not applicable | This is an opinion piece discussing the author's view that logging and thinning does not limit wildfires. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. |
| Wyoming Star Tribune. 2010. Science should lead pine beetle epidemic solutions. October 3. http://trib.com/news/opinion/editorial/article_f87d7db9-ed2a-5620-8d66-20556935c592.html | SC-02, Opposing Views Attachment #5, page 20 | Not applicable | This is not scientific peer reviewed literature. This is a newspaper article. |
| Zimmerman, E.A.; Wilbur, P.F. 2004. A forest divided. New Roxbury Land Trust newsletter. http://www.ourbetternature.org/forestfrag.htm | SC-02, Opposing Views Attachment #4, page 36 | Not relevant to this project | This is not a peer-reviewed article. The excerpt provides a generic description of forest fragmentation. The focus of the article is on forest lands divided into smaller parcels for development, including housing and how this "poses a serious and growing threat to the ability of forests to support wildlife, and provide clean air and water, recreational opportunities, and an economically viable source of wood product." The Magone Project is within the boundaries of the Malheur National Forest and does not fragment forest lands for the purpose of development. |
| Zoning News. Saving homes from wildfires: regulating the home ignition zone. May 2001. http://www.battle-creek.net/docs/fire/zoning.pdf | SC-02, Opposing Views Attachment #11, page 6 | Not applicable | This is not scientific peer reviewed literature. This is an organization representing the field of city and regional planning in the United States. The article is focused on private citizen home owners. |
| Zust, T., B. Joseph, K.K. Shimizu, D.J. Kliebenstein, and L.A. Turnbull. 2011. Using knockout mutants to reveal the growth costs of defensive traits. In: Proceeding of the | SC-26, page 18 | Not applicable | This article, while generalizing that all plants have some defense mechanism, it speaks specifically to *Arabidopsis thaliana*. The comment mentions |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Royal Society B. January 26. http://rspb.royalsocietypublishing.org/content/early/2011/01/20/rspb.2010.2475 | | | "supports the retention of slow growing old trees". This is what planned activities intend to accomplish. |
| **Watershed** | | | |
| Anderson, P.G. 1996. Sediment generation from forestry operations and associated effects on aquatic ecosystems. In: Proceedings of the Forest-Fish Conference: Land Management Practices Affecting Aquatic Ecosystems, Calgary, Alberta. http://www.for.gov.bc.ca/hfd/library/ffip/Anderson_PG1998.pdf | SC-02 Opposing Views Attachment #1, page 2 | Not used; consistent with other science used | Consistent with other science used to develop design features to minimize sediment. This article discusses the effects of logging and roads on aquatic habitats, particularly in relation to sediment delivery to streams. The article recommends measures to limit effects. These are similar to measures used for the project, including: PACFISH buffers that avoid timber harvest in riparian areas and provide a vegetated buffer to filter any sediment mobilized from harvest activities in uplands, installation of additional culverts to drain roadside ditches away from streams, the decommissioning of roads causing sediment inputs and riparian degradation, and using appropriate yarding systems to minimize soil disturbance. Actions proposed in the Magone Project include aquatic restoration work to speed recovery of riparian processes and functions affected by past land management activities including past delivery of fine sediment to streams. |
| Keppeler, E.T.; Ziemer,R.R; Cafferata, P.H. 1994. Effects of human-induced changes on hydrologic systems. An American Water Resources Association publication, June. http://www.fs.fed.us/psw/publications/ziemer/Ziemer94a.PDF | SC-02, Opposing Views Attachment #1, page 19 | Limited applicability | This is not the proper reference; the authors did not write this publication; they prepared an article for inclusion in it. Other people are the editors of the cited publication. The authors investigated and reported on how a zero-order swale was hydrologically affected by timber harvesting. Following timber harvests, increases in soil moisture were attributed to reduced evapotranspiration rates in the northwestern California topography and climate.<br>The geology, soils, and climate of the Magone project planning area is very different from the area studied in northwestern California, 10 kilometers from the Pacific Ocean. Water is the limiting growth factor in the Magone project planning area. Also the proposed actions in the Magone area include thinning trees, not clearcutting stands. When trees are thinned, it is to allow greater amounts of the |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | most limiting factor (water) to be made available to and used by the remaining trees to enhance growth much as the redwood sprouts used shallow water in the study area. Surplus water is not usually available as fine roots are responsive to the changed conditions and optimize use of water. In addition the analogous mechanism in the Magone planning area is that the its shallow and clayey soils infiltrate limited amounts of runoff, naturally resulting in higher rates of overland flow, rather than piping. The project hydrologist (with over 20 years' experience on the Malheur National Forest) has not observed piping to be a common mechanism associated with the root zone on the clay to clayey soils of the northern portion of the Blue Mountain Ranger District with the local climate; dominant mechanisms are described in the existing condition. Rare examples of piping have been observed under particular conditions related to soil displacement such as those associated with construction. |
| Roelofs, T.D. 2003. Testimony for the California State Water Board and Regional Water Quality Control Board regarding waivers of waste discharge requirements on timber harvest plans. August. http://webcache.googleusercontent.com/search?q=cache:QNy_aih1RxEJ:edennapa.org/thp/roelofstestimony.doc+%22timber+harvest%22+ph.d.+adverse&hl=en&ct=clnk&cd=5&gl=us | SC-02, Opposing Views Attachment #1, page 31 | Not applicable | This is an individual's testimony. It is not a peer-reviewed scientific article. |
| Science Blog. 2001. View of forest insects changing from pests to partners. Bio-Medicine.org. http://news.bio-medicine.org/biology-news-2/view-of-forest-insects-changing-from-pests-to-partners-8940-1 | SC-02, Opposing Views Attachment #5, page 13 | Not applicable | This is not scientific peer reviewed literature. |
| Scott, M.G. 2001. Forest clearing in the Gray's River Watershed 1905-1996. Research paper submitted in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE in GEOGRAPHY. Portland State University. http://www.markscott.biz/papers/grays/chapter1.htm | SC-02, Opposing Views Attachment #1, page 32 | Limited applicability and consistent with professional judgment used in the analysis | This is not a peer reviewed scientific article. It pertains to a geographical area that has climate and soils that are different from the project planning area. However, we believe the developments of the proposed actions are consistent with this information. Treatments are designed to emulate natural disturbance events and create more structure across the landscape. Past timber |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | management and fire suppression have simplified the structure of the upland and riparian forests. In addition, the species composition has changed due to alterations in canopy cover and microclimates. |
| Ziemer, R.R. 1992. Effect of logging on subsurface pipeflow and erosion: coastal northern California, USA. Proceedings of the Chengdu Symposium. IAHS Publication. No. 209. http://www.fs.fed.us/psw/publications/ziemer/Ziemer92.PDF | SC-02, Opposing Views Attachment #1, page 39 | Limited applicability | This article represents a U.S. Forest Service research study from the Erosion, Debris Flow, and Environment Symposium and is not peer-reviewed. It discusses how macropores from clearcut logging practices increase the movement of suspended sediment in these belowground pipes. See response to other article by Ziemer. |
| **Fisheries** | | | |
| Gibbons, D.R.; Salo, E.O. 1973. An annotated bibliography of the effects of logging on fish of the western United States and Canada. Gen. Tech. Rep. PNW-10. Portland, OR: USDA Forest Service, Pacific Northwest Forest and Range Experiment Station. http://and.lternet.edu/lter/pubs/pdf/pub441.pdf | SC-02, Opposing Views Attachment #4, page 3 | Percent fine sediment is analyzed as part of the effects analysis | Roads are recognized as potentially having adverse impacts to Mid-Columbia River steelhead through sediment introduction and roads are discussed as part of the effects analysis. Sediment is also a natural part of stream processes and therefore at any given time sediment is present in the system from natural events such as erosion, landslides, and valley pinch points. When a stream is in a degraded condition and has lost the physical elements that allow it to process, deposit and convey sediment in the system then potentially negative consequences for aquatic biota may occur.<br>PACFISH includes specific RMOs for percent fine sediment as part of the analysis for impacts to Mid-Columbia steelhead critical habitat in the project planning area. Percent fine data is collected on every stream surveyed within the project area using the Region 6 stream survey protocol. |
| Klein, A. 2004. Logging effects on amphibian larvae populations in Ottawa National Forest. http://www.nd.edu/~underc/east/education/documents/AKlein2004Pre-loggingsurveyofamphibianlarvaeinvernalpools.pdf | SC-02, Opposing Views Attachment #1, page 20 | Limited applicability | Commenter references this article in relation to the effects of logging on the spotted salamander and vernal ponds, attempting to correlate this research to a general adverse effect to all amphibians everywhere. However, a correlation of 0.50 does not equate to causation as stated in the reference, but merely implies a relationship that could include a whole host of other variables unrelated to the stated action (timber harvest) that could vary annually or even be related to climatic variation in |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | snowpack and precipitation. Additionally, this reference is not from a peer-reviewed journal; it is a paper written for a graduate course BIOS 569.<br>The spotted salamander *Ambystoma maculatum* is only found in the eastern United States, from Ontario east to Nova Scotia and south to Georgia and Texas. There are no identified vernal pools located within the Magone project planning area. While we agree that landscape changes can alter how water flows and collects, we have designed and located our timber harvest units to avoid and minimize impacts to hydrological features on the landscape such as seasonal ponds, fens, and wetlands. The primary focus of aquatic activities associated with the Magone Project timber harvest activities include retention of water on the landscape for storage and gradual release into drier summer months. While there are no designated vernal pools in the area, we have established best management practices that will protect riparian habitat conservation areas and waterways from the project as planned. Various aquatic restoration components accompany this timber plan, which will benefit the landscape moving into the future. |
| McIntosh, B.A.; Sedell, J.R.; Smith, J.E. [et al.]. 1994. Management history of eastside ecosystems: changes in fish habitat over 50 years, 1935-1992. PNW-GTR-321. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. 93-181.<br>http://www.fs.fed.us/pnw/publications/pnw_gtr321/ | SC-02, Opposing Views Attachment #1, page 23 | Limited applicability | Commenter cites this article in relation to past logging practices and damage to aquatic habitats through siltation, reduction in stream complexity, and increased water temperatures. This article was produced in 1994 from surveys that were done in 1934 to 1942 in the Grande Ronde, Yakima, Wenatchee, and Methow river basins; portions of those initial streams were re-surveyed from 1990 to 1992. The information supplied in this article is outdated. While historic land-use management practices degraded aquatic and wildlife habitat in the surveyed areas as well as the project planning area, management actions have changed since the early to mid-1900s. Eastern Oregon aquatic habitat is no longer declining. Strategies to protect, restore, and rehabilitate aquatic habitat and populations is now a priority while planning and implementing |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | timber harvest plans. The watershed approach to protect and restore aquatic habitats recommended in the article is currently being implemented in the proposed action. Being that this literature outdates our land-use management by 30 years, it has limited applicability to the Magone Project. |
| Moring, J.R. 1975. The Alsea watershed study: effects of logging on the aquatic resources of three headwater streams of the Alsea River, Oregon – Part III. Fishery Report Number 9. Oregon Department of Fish and Wildlife. http://www.for.gov.bc.ca/hfd/library/ffip/Moring_JR1975b.pdf | SC-02, Opposing Views Attachment #1, page 24 | Not applicable | Commenter cites this article in relation to logging practices causing environmental changes to streams, including siltation, logging debris, gravel scouring, destruction of developing embryos and alevins, blockage of streamflow, decrease in surface and intragravel dissolved oxygen, increase in maximum and diel water temperatures, changes in pool/riffle ratios and cover, redistribution of fishes, reduction in fish numbers, and reduction in total biomass. This article is nearly 40 years old and is outdated. Timber harvesting practices described in the article no longer occur on public lands and are not proposed in the Magone Project. Project design criteria and best management practices are applied to all proposed actions in the Magone Project and are effective at preventing or minimizing the effects of logging described in the article. |
| **Roads** | | | |
| Amaranthus, M.P.; Rice, R.M.; Barr, N.R.; Ziemer R.R. 1985. Logging and forest roads related to increased debris slides in southwestern Oregon. Journal of Forestry 83(4). | SC-02, Opposing Views Attachment #4, pages 2 and 5 | Limited applicability | This paper reviews landslide frequency as affected by forest management in the coastal mountains of southwest Oregon. The authors found a six-fold increase in landslide volume in Forest Service-logged areas compared with unharvested areas, as well as erosion rates that were 100 times greater on roads and landings compared with undeveloped areas.<br>The study area geomorphology and climate are different from that of the Magone project planning area. The DEIS acknowledges the effects of roads on erosion (sedimentation). These effects are disclosed in the DEIS in the aquatics and hydrology sections. Additionally, mitigation measures to address erosion from roads is prescribed and discussed in the DEIS and its appendices. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Baker. 2003. | SC-02, Opposing Views Attachment #4, page 19 | Unable to locate reference | Unable to locate reference based on citation given. |
| Bennett, A. F. 1991. Roads, roadsides and wildlife conservation: a review. Nature conservation 2: the role of corridors. | SC-02, Opposing Views Attachment #4, page 5 | Unable to locate reference | Unable to locate reference based on citation given. |
| Borga, M.; Tonelli, F.; Dalla Fontana, G.; Cazorzi, F. 2003. Evaluating the effects of forest roads on shallow landsliding. Geophysical Research Abstracts, Vol. 5, 13312. http://www.cosis.net/abstracts/EAE03/13312/EAE03-J-13312.pdf | SC-02, Opposing Views Attachment #4, page 3 | Not relevant to this project | This reference has little relevance to the proposed project. This study was conducted in northeastern Italy where the landscape, climate, soils, and geology are so different that almost no correlation could be reached in regards to the proposed project. |
| Bowling, L.C.; Lettenmaier, D.P.; Wigmosta, M.S.; Perkins, W.A. 1996. Predicting the effects of forest roads on streamflow using a distributed hydrological model [Poster]. Presented at a meeting of the American Geophysical Union, San Francisco, CA. http://www.ce.washington.edu/~lxb/poster.html | SC-02, Opposing Views Attachment #4, page 4 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Brister, D. 1998. A review and comment on: Forest Service roads: a synthesis of scientific information, 2nd Draft, USDA Forest Service. | SC-02, Opposing Views Attachment #4, page 5 | Not relevant to this project | The article cited is an opinion paper offering review and comment on Forest Service Roads: A Synthesis of Scientific Information", 2nd Draft, December 1998. A more recent version of this report (Forest Roads: A Synthesis of Scientific Information, PNW-GTR-509) was published in 2001. The article written by Mr. Brister suggests the Forest Service include in the final document an assessment of socio-economic impacts of forest system roads. The final document includes two sections on this topic 1) Direct Socioeconomic and 2) Indirect Socioeconomic Effects.<br>The report published in 2001 (as did previous drafts) analyzes the effects of existing National Forest System roads but does not analyze the effects of temporary roads. The analysis of the socio-economic impacts of the existing National Forest System road infrastructure is beyond the scope of this project. |
| Burns, J.W. 1972. Some effects of logging and associated road construction on northern California streams. Transactions of the American Fisheries Society. 1(1). http://www.fs.fed.us/psw/publications/4351/Burns72.pdf | SC-02, Opposing Views Attachment #4, page 7 | Limited applicability – sediment delivery to streams was a primary consideration in | The commenter references this article in relation to the effects of logging and road construction on streams and fish, suggesting, "Sustained logging and associated road construction over a period of many years do not afford either the stream of the |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | project design, but this article is dated and analyzes treatments in much greater proximity and magnitude to streams than those proposed in the Magone Project. | fish population a chance to recover." This article is over 40 years old, analyzing the effects to streams from a logging project that occurred nearly 50 years ago. In the project referenced, 66 kilometers of road were constructed, including 4 crossings, within 76 meters of the stream, plus the entire area between the road and stream was logged and they ran dozers over 41 percent of the stream length in the stream to remove slash and skid trees.<br>Commercial timber harvest practices and associated road activities have changed considerably over the past half century. The Magone Project design criteria (PDCs) include PACFISH buffers around riparian areas that have proven effective at avoiding or minimizing sediment delivery to streams from timber harvest. Thoughtful project design and PDCs are in place to minimize potential sediment delivery to streams from all proposed actions. The Magone Project also includes many aquatic restoration actions aimed at contributing to recovery of Endangered Species Act listed fish that occur within the project planning area, including restoration of floodplain connectivity, restoring stream and floodplain roughness elements such as large wood that provide quality fish habitat, removal of fish passage barriers, and riparian enhancement thinning to restore meadows, and reinvigorate hardwood shrub communities. |
| Cederholm [et al.]. 1981. | SC-02, Opposing Views Attachment #4, page 6 | Unable to locate reference | Unable to locate reference based on citation given. |
| deMaynadier, P.G.; Hunter, M.L., Jr. 2000. Road effects on amphibian movements in a forested landscape. Natural Areas Journal. 20(1): 56-65. | SC-02, Opposing Views Attachment #4, page 7 | Not Applicable | Commenter references this article in support of a position that forest roads may inhibit movements of some amphibian species. The article investigated movements of 8 species of frogs and salamanders in Maine across a wide heavily used logging road, a narrow less used road, and unroaded control sites. The article found that frog "habitat use and movements were unaffected even by the larger road." The article did find reduced salamander abundance near roads and reduced salamander movement across roads. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | Regarding effects of the proposed action on amphibians, the only amphibian in the project planning area that is either federally listed, a Forest Management Indicator Species, or a Region 6 Sensitive Species (requiring analysis within the DEIS) is the Columbia spotted frog (Region 6 sensitive). Since the article found no effects to frog movement (does not support the commenter's position), it studied species that do not occur in the project planning area, and occurred in a very different ecosystem, this article is not applicable to the Magone Project analysis. |
| Dombeck, M., U.S. Forest Service Chief, 1997-2001. Remarks made to Forest Service employees and retirees at the University of Montana. February 1998. | SC-02, Opposing Views Attachment #4, page 8 | Relevant to this project | In his speech, Chief Dombeck shares the core principles of his forthcoming natural resource agenda, which addresses watershed health and restoration, sustainable forest ecosystem management, forest roads and recreation; and shares highlights of the President's proposed FY99 budget. With respect to roads, Chief Dombeck states that forest roads are an essential part of the transportation system, providing benefits as well as causing serious ecological impacts. Thus, he proposed a new long-term forest road policy with four primary objectives: 1) More carefully consider decisions to build new roads, 2) Eliminate old unneeded roads, 3) Upgrade and maintain the roads important to public access, and 4) Develop new and dependable funding for forest road management.<br>The haul routes that would be used to haul timber from the Magone Project would receive needed maintenance work prior to any log hauling to reduce sediment delivery to adjacent streams. |
| Elseroad. 2001. | SC-02, Opposing Views Attachment #4, page 18 | Unable to locate reference | Unable to locate reference based on citation given. |
| EPA entry into the Federal Register: March 3, 2000 (Volume 65, Number 43) page 11675, National Forest System Road Management. | SC-02, Opposing Views Attachment #4, page 8 | Not relevant to this project | Excerpt from a March 3, 2000 Federal Register Notice posted by the Forest Service. The Forest Service concluded that it needed to review its forest road system policy, one of four emphasis items in the agency's National Resource Agenda. The Agency proposed to revise 36 CFR Part 212 to shift the emphasis from transportation development to |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | managing environmentally sound access.<br>The Magone Project follows current law, regulation, and policy. |
| Forman, R.T.; Alexander, L.E. 1998. Roads and their major ecological effects. Annual Review of Ecology and Systematics. 29: 207-231. | SC-02, Opposing Views Attachment #4, page 10 | Relevant to this project | Many of the effects discussed in this paper are those associated with paved, well-maintained, high-speed roads. However, it is recognized that lower-standard, unpaved Forest roads have effects as well. See the wildlife effects section of the DEIS and the Wildlife Report regarding the effects of roads on wildlife species present in the project planning area. |
| Furniss, M.J.; Roelofs, T.D.; Yee, C.S. 1991. Road construction and maintenance. American Fisheries Society Special Publication. (19): 297-323. | SC-02, Opposing Views Attachment #4, page 6 | Unable to locate reference | |
| Furniss, M.J.; Love, M.; Flanagan, S.A. 1997. Diversion potential at road-stream crossings. USDA Forest Service, Technology and Development Program. 9777 1814—SDTDC. http://www.stream.fs.fed.us/water-road/w-r-pdf/diversionpntl.pdf | SC-02, Opposing Views Attachment #4, page 11 | Relevant to this project | This comment is a quotation from an article in the water/road interaction technology series produced by San Dimas Technology and Development Center and does not refer to specific conditions in the Magone project planning area. The article discusses the potential effects of water being diverted out of road/stream crossings. These concerns about the existing road system were included in the existing condition discussion for hydrology and aquatics; new stream crossings on authorized roads are not proposed in the alternatives in the Magone Project. Also, re-designing road crossings to improve aquatic conditions is beyond the scope of the Magone Project. The article makes specific recommendations for designing stream crossings; these (or similar practices) are incorporated into the Malheur National Forest's Aquatic Restoration Decision under which the expected replacement of culverts in the Magone project planning area is considered to be foreseeable activities (see Magone DEIS chapter 3) and discussed under cumulative effects. |
| Grayson [et al.]. 1993. | SC-02, Opposing Views Attachment #4, page 5 | Unable to locate reference | Unable to locate reference based on citation given. |
| Grace, J.M., III. 2003. Minimizing the impacts of the forest road system. In: Proceedings of the conference 34 | SC-02, Opposing Views Attachment #4, page 12 | Relevant to this project | This study evaluates alternative means (vegetation, riprap, sediment fences, and settling basins) of |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| international erosion control association; ISSN 1092-2806. [Place of publication unknown]: International Erosion Control Association: 301-310. http://www.srs.fs.usda.gov/pubs/ja/ja_grace011.pdf | | | filtering sediment laden road runoff before it reaches the forest floor on the Tuskegee National Forest in Alabama.<br>The Magone Project includes a variety of project design criteria and best management practices designed to minimize sediment runoff from roads. See DEIS Appendix C – Project Design Criteria. |
| Gucinski, H.; Furniss, M.J.; Ziemer, R.R.; Brookes, M.H., eds. 2001. Forest roads: a synthesis of scientific information. Gen. Tech. Rep. PNW-GTR-509. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. http://www.fs.fed.us/pnw/pubs/gtr509.pdf | SC-02, Opposing Views Attachment #4, page 13 | Reviewed for background information; consistent with literature used in analysis | Discusses the connection of roads to community economic and resource impacts. |
| Hann, W.J. [et al.]. 1997. Landscape dynamics of the Basin. In: Quigley, T.M.; Arbelbide, S.J., eds. An assessment of ecosystem components in the Interior Columbia Basin and portions of the Klamath and Great Basins, Volume II. PNW-GTR-405. USDA Forest Service: 337-1,055. http://www.fs.fed.us/pnw/pubs/gtr405/pnw_gtr405aa.pdf | SC-02, Opposing Views Attachment #4, pages 13-14 | Relevant to this project; provides background information | This document is part of *An Assessment of Ecosystem Components in the Interior Columbia Basin and Portions of the Klamath and Great Basins*, an effort to provide detailed information about current conditions and trends for the biophysical and social systems within the Basin. The abstract states that this information can be used by land managers to develop broad land management goal and priorities and provides the context for decisions specific to smaller geographic areas. |
| Hawbaker, T.J.; Radeloff, V.C.; Clayton, M.K. [et al.]. 2006. Road development, housing growth, and landscape fragmentation in northern Wisconsin: 1937–1999. Ecological Applications. 16(3): 1222-1237. http://www.esajournals.org/doi/abs/10.1890/1051-0761%282006%29016%5B1222%3ARDHGAL%5D2.0.CO%3B2?journalCode=ecap | SC-02, Opposing Views Attachment #4, page 15 | Limited applicability | This study looked at road density, patch size, and housing density to evaluate the pattern of fragmentation over time. The Magone project planning area is National Forest System land, and will not be developed for housing.<br>See the wildlife effects section of the DEIS and the Wildlife Report regarding the effects of roads and road density on wildlife species present in the project planning area. |
| Haskell, D.G. 1999. Effects of forest roads on macroinvertebrate soil fauna of the southern Appalachian Mountains. Conservation Biology. 14(1): 57-63. http://www.jstor.org/stable/2641904 | SC-02, Opposing Views Attachment #4, page 14 | Relevant to this project | This study looks at the effect of roads on macroinvertebrate fauna of the soil, depth of the leaf-litter layer.<br>See the soils section of the DEIS and the Soils Report regarding the impacts of existing and proposed roads to soils. |
| Ivins, M. 1997. Opinion article posted to creators.com. | SC-02, Opposing Views | Not applicable | This is an opinion pieces discussing the author's |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| August 3. http://www.creators.com/opinion/molly-ivins/molly-ivins-august-3-1997-08-03.html | Attachment #4, page 16 | | opinion on a variety of topics, including logging roads. It is not scientific, peer-reviewed literature and contains no sources, references, or literature cited. |
| Jones, J.A., Swanson, F.J.; Wemple, B.C.; Snyder, K.U. 2000. Effects of roads on hydrology, geomorphology, and disturbance patches in stream networks. Conservation Biology. 14(1): 76-85. http://www.jstor.org/stable/2641906 | SC-02, Opposing Views Attachment #4, page 16 | Consistent with professional judgment used in the analysis | This peer-reviewed scientific article developed a conceptual model for evaluating how road networks interact with stream networks at a landscape scale. Of particular interest is how road networks interact with streams for peak flows and debris flows. They used observations from a number of studies from the H.J. Andrews Experimental Forest and established a framework for illustrating how road-stream interactions involve peak flows and debris flows. |
| Kahklen, K. 2001. A method for measuring sediment production from forest roads. Res. Note. PNW-RN-529. Portland, OR: USDA Forest Service, Pacific Northwest Research Station.<br>http://www.fs.fed.us/pnw/pubs/rn529.pdf | SC-02, Opposing Views Attachment #4, page 17 | Out of scope of project | This is a U.S. Forest Service Research Note on a method to measure sediment production from forest roads. It provides examples on measuring sediment that have been used in southeast Alaska.<br>Measuring sediment in this analysis is out of the scope of the project. Data collection efforts focused on finding road-stream connections and moving those road segments forward to eliminate the connectivity. Road-stream connectivity was used as a surrogate for understanding the sediment. |
| Lawren, Bill. 1992. Singing the blues for songbirds: bird lovers lament as experts ponder the decline of dozens of forest species. National Wildlife.<br>http://www.nwf.org/news-and-magazines/national-wildlife/birds/archives/1992/singing-the-blues-for-songbirds.aspx | SC-02, Opposing Views Attachment #4, page 18 | Not applicable | This is not scientific peer reviewed literature. This writing is from a private citizen advocacy organization doing their specific outreach. |
| Lowe, K. 2005. Restoring forest roads. A Northern Arizona University Ecological Restoration Institute publication. Working Paper 12. http://www.eri.nau.edu/en/information-for-practitioners/restoring-forest-roads | SC-02, Opposing Views Attachment #4, page 19 | Relevant to this project | This publication presents an overview of the ecological problems caused by forest roads and a guide to methods that can be used in their restoration.<br>Approximately 0.3 miles of road would be decommissioned as part of this project. Temporary roads would be rehabilitated following harvest activities. |
| Lyon. 1984. | SC-02, Opposing Views Attachment #4, page 5 | Unable to locate reference. | Unable to locate reference based on citation given. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| Luce, C.H. 2002. Hydrological processes and pathways affected by forest roads: What do we still need to learn? Hydrologic Processes. 16(14): 2901–2904. | SC-02, Opposing Views Attachment #4, page 19 | Relevant to this project | This is a commentary article discussing the effects of roads on sediment generation. The publication poses several research questions relating to the physics of road interception and how the hillslope responds during rare events compared with common events.<br>The Magone Project would decommission approximately 0.3 miles of road. |
| Maholland, B.; Bullard, T.F. 2005. Sediment-related road effects on stream channel networks in an eastern Sierra Nevada watershed. Journal of the Nevada Water Resources Association . 2(2). | SC-02, Opposing Views Attachment #4, page 20 | Limited applicability | This publication describes the results of a study on Squaw Creek in California identifying and characterizing sources of sediment, including impacts from road networks on sediment delivery to the stream network.<br>The Magone Project includes a variety of project design criteria and best management practices to minimize sedimentation from roads related to this project. See DEIS Appendix C – Project Design Criteria.<br>The haul routes that would be used to haul timber would receive needed maintenance work prior to any log hauling to reduce sediment delivery to adjacent streams. |
| Malecki, R.W. 2006. A new way to look at forest roads: the road hydrologic impact rating system (RHIR). The Road-RIPorter, Autumn Equinox. http://www.wildlandscpr.org/field-notes/new-way-look-forest-roads-road-hydrologic-impact-rating-system-rhir | SC-02, Opposing Views Attachment #4, pages 20-21 | Limited applicability | This publication describes a system the author developed to provide a summary of forest road data and to compare forested ecosystems in the intermountain West. It is not scientific, peer-reviewed literature. |
| McCashion, J.D.; Rice, R.M. 1983. Erosion on logging roads in northwestern California: How much is avoidable? Journal of Forestry. 8(1): 23-26. http://www.fs.fed.us/psw/publications/rice/McCashion.pdf | SC-02, Opposing Views Attachment #4, pages 5and 21 | Limited applicability | This 1983 article assessed the sources of erosion and the extent to which road-related erosion is avoidable on 344 miles of logging roads in northwestern California.<br>Historical logging practices, including road construction and maintenance, were based on entirely different management objectives and are a very poor indicator of effects of modern federal forestry practices focused on current restoration based science principles. Chapter 3 of the DEIS will discuss an analysis of the impacts of roads and mitigation measures. |
| McFero, G.J., III. 2004. Sediment plume development | SC-02, Opposing Views | Not applicable | This paper was presented at an international |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| from forest roads: How are they related to filter strip recommendations? An ASAE/CSAE meeting presentation, paper number 045015.<br>http://www.srs.fs.usda.gov/pubs/ja/ja_grace017.pdf | Attachment #4, pages 21-22 | | meeting in Canada. It is not a peer-reviewed scientific article. It looks at sediment travel distances downslope of forest roads and understand the factors affecting these distances. This study was done in Alabama and Georgia and makes recommendations specifically for Alabama and Georgia.<br>This paper is not applicable to the Magone project planning area. The geology, soils, and climate are too different between the project planning area and the cited study area. |
| McGarigal, K.; Romme, W.H.; Crist, M.; Roworth, E. 2001. Cumulative effects of roads and logging on landscape structure in the San Juan Mountains, Colorado (USA). Landscape Ecology. 16(4). | SC-02, Opposing Views Attachment #4, page 22 | Limited applicability | This is a peer-reviewed scientific article that investigated the effects of roads and logging on disturbance regimes and landscape patterns. They found roads to have a bigger impact on landscape structure than logging in their study area in the southern Rocky Mountains.<br>The silviculture report investigates patch size dynamics that were present in the 1939 aerial photo records and used those observations to mimic through silvicultural treatments. Treatments are also designed to be within the historical range of variability for any particular biophysical environment. Otherwise, cumulative effects do not evaluate changes to landscape structure. Cumulative effects to hydrology did evaluate peak flow and annual water yield effects due to past, present, and future logging activities and road networks. |
| Meffe [et al.]. 1997. | SC-02, Opposing Views Attachment #4, pages 1 and 33 | Unable to locate reference | |
| Megahan, W.F.; Kidd, W.J. 1972. Effects of logging and logging roads on erosion and sediment deposition from steep terrain. Journal of Forestry. 70.3: 136-141.<br>http://www.ingentaconnect.com/content/saf/jof/19720000070/00000003/art00007 | SC-02, Opposing Views Attachment #4, page 3 | Not applicable | This is a peer-reviewed article. The study looked at effects of jammer and skyline logging in steep ephemeral drainages in the Idaho Bathylith (highly decomposed and erosive granitic soil) and concurrently evaluated the effects of roads associated with the jammer logging system on sediment production. This study does not apply to the Magone project planning area for three reasons: 1) soils in the Magone project planning |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | area are less erosive (and erosive in different ways, for example due to subsoil characteristics) than the granitic soils of the Idaho Bathylith; 2) jammer logging systems requiring an extensive road system are no longer used on the Malheur National Forest, and 3) the study area was located on steep slopes, substantially steeper than the Magone project planning area. Also the authors noted that two large run off events, one of which is described as "one of the largest rain and snow storms on record for this area" occurred during the sample period and that the study areas was located on an area previously disturbed by similar large events about 8 years previously. The authors limited the applicability of the results to areas under similar conditions. |
| Megahan, W.F. 1980. Nonpoint source pollution from forestry activities in the western United States: results of recent research and research needs. In: Proceedings of forestry and water quality: What course in the 80s? Water Pollution Control Federation, Washington, DC: 92-151. | SC-02, Opposing Views Attachment #4, page 5 | Not applicable | This article is unlikely to have been peer reviewed because it was published in the proceedings of a conference at which papers are commonly accepted without requiring technical peer review. The Introduction states that it is a literature review. The studies, which may or may not have been peer reviewed, reviewed for the effects of roads section were located in areas with slopes substantially steeper and with soils that are recognized as substantially more erosive and sensitive to the effects of roads than those in the Magone project planning area. |
| Megahan, W.F. 2003. Predicting road surface erosion from forest roads in Washington State [Presentation]. Geological Society of America meeting. http://gsa.confex.com/gsa/2003AM/finalprogram/abstract_67686.htm | SC-02, Opposing Views Attachment #4, page 23 | Not applicable | The author states that the model is intended for use on forest roads in Washington State. |
| Montgomery, D. 1998. Statement at press conference with Senator Robert Torricelli about S. 977 and HR 1376), the Act to Save America's Forests. April 28. http://www.saveamericasforests.org/news/ScientistsStatement.htm | SC-02, Opposing Views Attachment #4, page 23 | Not applicable | This document includes statements from scientists supporting the Act to Save America's Forest (S. 977, HR 1376). It contains no sources, references, or literature cited and is not scientific, peer-reviewed literature. |
| Noss, R. 1995. The ecological effects of roads or the road to destruction. Wildlands CPR. | SC-02, Opposing Views Attachment #4, page 24 | Not applicable | This is an opinion pieces discussing the author's opinion on the effects of roads. It is not scientific, peer-reviewed literature and contains no sources, |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | references, or literature cited. |
| Ortega, Y.K.; Capen, D.E. 1999. Effects of forest roads on habitat quality for ovenbirds in a forested landscape. Auk. 116(4): 937-946. http://www.fs.fed.us/rm/pubs_other/rmrs_1999_ortega_y001.html | SC-02, Opposing Views Attachment #4, page 25 | Not applicable | This article describes a study looking at the influence of forest roads on ovenbird density in an extensively forested region of Vermont. This species of bird does not occur on the Malheur National Forest. |
| Reed, R.A.; Johnson-Barnard, J.; Baker, W.A. 1996. Contribution of roads to forest fragmentation in the Rocky Mountains. Conservation Biology. 10: 1098-1106. | SC-02, Opposing Views Attachment #4, page 26 | Relevant to this project | This study quantified fragmentation due to roads in a section of the Medicine Bow-Routt National Forest in southeastern Wyoming, looking at number of patches, mean patch area, mean interior area, mean area of edge influence, mean patch perimeter, total perimeter, and mean patch shape identified patch- and edge-related landscape changes. The study found that roads added to forest fragmentation more than clear cuts, and that fragmentation due to roads could be minimized if road construction is minimized or rerouted so that its fragmentation effects are reduced.<br>Fragmentation would be reduced with the approximately 0.3 miles of road would be decommissioned. Temporary roads would be rehabilitated following harvest activities. |
| Reid, L.M.; Dunne, T. 1984. Sediment production from forest road surfaces. Water Resources Research. 20(11): 1753–1761. | SC-02, Opposing Views Attachment #4, page 27 | Limited applicability | The study described in this article looked at runoff rates and sediment concentrations from 10 road segments subject to a variety of traffic levels in the Olympic Mountains of Washington. The study showed roads with heavy traffic contributed more sediment.<br>Logging activities during this study occurred when turbidity was permitted in ditches associated with hauling activities. However, the Magone Project includes a variety of project design criteria and best management practices to minimize sedimentation from roads related to this project. See DEIS Appendix C – Project Design Criteria. |
| Reid, L.M.; Ziemer, R.R.; Furniss, M.J. 1994. What do we need to know about roads? USDA Forest Service, Pacific Southwest Research Station. http://www.fs.fed.us/psw/publications/reid/4Roads.htm | SC-02, Opposing Views Attachment #4, page 27 | Relevant to this project | This publication was based on the knowledge and opinions of those attending interdisciplinary and interagency workshops held at the Humboldt Interagency Watershed Analysis Center in 1994. The document inventories methods and information requirements for looking at a road system for |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | transportation planning and land management decisions.<br>These recommendations are consistent with the process used in selecting roads to close and decommission as part of the Magone Project. |
| Reynolds [et al.]. 1992. | SC-02, Opposing Views Attachment #4, page 34 | Unable to locate reference. | Unable to located article based on citation given. |
| Rice, R.M.; Tilley, F.B, Datzman, P.A. 1979. A watershed's response to logging and roads: South Fork of Caspar Creek, California, 1967-1976. Res. Paper. PSW-146. USDA Forest Service. http://www.fs.fed.us/psw/publications/rice/Rice79.pdf | SC-02, Opposing Views Attachment #4, page 28 | Not applicable | This 1979 publication describes the effects of logging and road construction. Historical logging practices, including road construction and maintenance, were based on entirely different management objectives and are a very poor indicator of effects of modern federal forestry practices focused on current restoration based science principles. |
| Riedel, M.S.; Vose, J.M. 2002. Forest road erosion, sediment transport and model validation in the southern Appalachians [Presentation]. Second Federal Interagency Hydrologic Modeling Conference. http://www.srs.fs.usda.gov/pubs/ja/ja_riedel002.pdf | SC-02, Opposing Views Attachment #4, page 28 | Not applicable | The purpose of the study described in this publication is to determine the ability of a watershed-scale erosion model to assess sediment production, delivery to streams, and predict restoration effectiveness in the Conasauga River Watershed in northern Georgia and southern Tennessee.<br>Data was collected in the Magone project planning area on road condition to identify where roads may be degrading water quality. This information was used to make changes to the road network as part of the proposed actions. Maintenance is planned for roads where they could not be decommissioned. |
| Robinson [et al.]. 1995. | SC-02, Opposing Views Attachment #4, page 1 | Unable to locate reference | Unable to locate reference based on citation given. |
| Rowland, M.M., M.J. Wisdom, B.K. Johnson, and M.A. Penninger. 2004. Effects of roads on elk: implications for management in forested ecosystems. In: Rahm, J. ed. Transactions of the 69th North American Wildlife and Natural Resources Conference, Spokane WA: 491-508. http://www.fs.fed.us/pnw/pubs/journals/pnw_2004_rowland001.pdf | SC-02, Opposing Views Attachment #4, page 29 | Applicable | This paper's goals are to describe current knowledge about effects of roads on elk, an example in which a distance-band approach was used to evaluate habitat effectiveness for elk in relation to roads, and broader implications of road-related policies and land management with regard to elk.<br>The impacts of roads and road density on elk are discussed in the Wildlife Report and Magone DEIS |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | chapter 3. |
| Schwartz, C.1998 Wildlife and roads. The Interagency Forest Ecology Study Team (INFEST) March newsletter. http://www.sf.adfg.state.ak.us/sarr/forestecology/fsroads.cfm | SC-02, Opposing Views Attachment #4, page 30 | Not applicable | The link provided goes to a State of Alaska webpage about Sport Fisheries in Alaska. |
| Shanley, J.B.; Wemple, B. 2002. Water quantity and quality in the mountain environment. Vermont Law Review. 26: 717. http://www.uvm.edu/~bwemple/pubs/shanley_wemple_law.pdf | SC-02, Opposing Views Attachment #4, page 31 | Not applicable | This document focuses on the data gap around ski area and mountain resort effects on streams, especially in the northeastern United States and Canada. The paper concludes that lawmakers, policy makers, and land managers need a greater scientific foundation on which to base their decisions on development in the mountain environment. The Magone Project does not propose any ski area or resort development. |
| Swift, L.W., Jr.1984. Soil losses from roadbeds and cut and fill slopes in the Southern Appalachian Mountains. Southern Journal of Applied Forestry. 8: 209-216. http://cwt33.ecology.uga.edu/publications/403.pdf | SC-02, Opposing Views Attachment #4, page 31 | Not Applicable | No new authorized road construction is proposed in the Magone Project. This article discusses soil loss from roads and their cut/fill slopes in their study area in the Southern Appalachian Mountains. Soil losses were measured off forest roads. Cut and fill slopes were found to be the biggest contributors of soil loss. Grass cover can mitigate these losses. The rainfall described for the study area is nearly three times that in the Magone project planning area and falls primarily as rain compared to the majority of precipitation in the project planning area falls as snow. Erosion processes resulting from runoff from rain differ from those resulting from snowmelt, especially in the local near-continental climate where night time temperatures below freezing are common during snowmelt season and control the rate of snowmelt and associated runoff. |
| Switalski, A. 2003. Where have all the songbirds gone? Roads, fragmentation, and the decline of neotropical migratory songbirds. Wildlands CPR. September 8. http://www.wildlandscpr.org/node/213 | SC-02, Opposing Views Attachment #4, page 32 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Trombulak, S.C.; Frissell, C.A. 2000. Review of ecological effects of roads on terrestrial and aquatic communities. Conservation Biology. 14(1): 18–30. | SC-02, Opposing Views Attachment #4, pages 18 and 33 | Consistent with project | This document discusses the effects of roads on terrestrial and aquatic resources. It recommends building no roads in sparsely or unroaded areas and encourages removal of unneeded roads. No new authorized road construction is proposed in the Magone Project. Temporary roads would be |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | located in previously generally roaded areas as they would intersect with existing roads. The Magone Project would decommission 0.3 miles of road. |
| USDA Forest Service. Forest fragmentation and roads [Webpage]. Southern Research Station, Eastern Forest Environmental Threat Assessment Center. http://www.forestthreats.org/publications/su-srs-018/fragmentation | SC-02, Opposing Views Attachment #4, page 9 | Consistent with analysis | This is a section from the "Forest Health Monitoring National Technical Reports: Examples of Analyses and Results from 2001-2004." The information is consistent with analysis in the wildlife section of the DEIS. |
| Wade. 1998. | SC-02, Opposing Views Attachment #4, page 5 | Unable to locate reference | Unable to locate reference based on citation given. |
| Watson, M.L. 2005. Habitat fragmentation and the effects of roads on wildlife and habitats. Background and literature review. http://www.wildlife.state.nm.us/conservation/habitat_handbook/documents/2004EffectsofRoadsonWildlifeandHabitats.pdf | SC-02, Opposing Views Attachment #4, page 34 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Williams. 1998. | SC-02, Opposing Views Attachment #4, page 5 | Unable to locate reference | Unable to locate reference based on citation given. |
| Winslow [et al.]. 2000. | SC-02, Opposing Views Attachment #4, page 1 | Unable to locate reference | Unable to locate reference based on citation given. |
| Wright, B. 2009. Excerpt from a May 11, 2009 letter to the Rogue River-Siskiyou National Forest Travel Management Team. http://www.pacificrivers.org/protection-defense/comment-letters/Rogue%20River%20Siskiyou%20TMP%20DEIS.pdf | SC-02, Opposing Views Attachment #4, page 35-36 | Not applicable | This is a letter from the Pacific Rivers Council to the Rogue River-Siskiyou National Forest commenting on the Rogue River-Siskiyou Motorized Vehicle Use Draft Environmental Impact Statement. This does not apply to the Magone Project. |
| Yahner, R.H. 1988. Changes in wildlife communities near edges. Conservation Biology. 2(4): 333-339. http://www.jstor.org/stable/2386292?seq=1#page_scan_tab_contents | SC-02, Opposing Views Attachment #4, page 1 | Limited applicability | The paper discusses potential negative consequences of edge effects to some wildlife species and calls for more research on the topic. The project planning area contains many inherent edges while action alternatives create even more induced edges of different types and dimensions. However, analysis considers multiple wildlife species and their relationship to treatments and habitat types, and connectivity corridors would be established to provide for movement and permeability across the landscape. |
| **Soils** | | | |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Elliot, W.J.; Page-Dumroese, D.; Robichaud, P.R. 1999. The effects of forest management on erosion and soil productivity. Proceedings of the Symposium on Soil Quality and Erosion Interaction, Keystone, CO, July 7, 1996. Ankeney, IA: Soil and Water Conservation Society. http://forest.moscowfsl.wsu.edu/smp/docs/docs/Elliot_1-57444-100-0.html | SC-02, Opposing Views Attachment #1, page 50 | Limited applicability | Applicability of this paper is limited 1) because the statement "... erosion, in combination with other site factors, works to degrade productivity on the scale of decades and centuries" is not supported by information presented in the paper, and 2) because this statement is not universally applicable but it does not admit this. Other relevant conclusions are consistent with the Magone analysis. |
| Slaymaker, O. 2000. Assessment of the geomorphic impacts of forestry in British Columbia. AMBIO: A Journal of the Human Environment. 29(7): 381-387. http://www.bioone.org/doi/abs/10.1579/0044-7447-29.7.381 | SC-02, Opposing Views Attachment #1, page 34 | Limited applicability | This paper is a review. Applicability is limited because it is too short and so does not differentiate effects based on important factors such as climate (rain forest versus ponderosa pine), slope, harvest intensity (clearcuts versus thinning), and soil. It does indicate that implementation of the Forest Practices Code (which overlap with best management practices in Magone) was expected to minimize impacts. |
| **Wildlife** | | | |
| Barnard, E.L. 2004. Forest health fundamentals. Florida Department of Agriculture and Consumer Services. http://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/Our-Forests/Forest-Health/Forest-Health-Fundamentals | SC-02, Opposing Views Attachment #5, page 1 | Not applicable | This is not scientific peer reviewed literature. |
| Barry, G. 2004. Insect attacks may benefit Colorado forests. Forest.org. January 29. http://forests.org/shared/reader/welcome.aspx?linkid=28857 | SC-02, Opposing Views Attachment #5, page 2 | Not applicable | This is not scientific peer reviewed literature. This is an article written for an advocacy website. |
| Black, S.H. 2008. Excerpt from a 2008 comment letter to Alice Allen Hell Canyon Ranger District, Black Hills National Forest. http://www.xerces.org/wp-content/uploads/2008/09/black_hills_comments.pdf | SC-02, Opposing Views Attachment #5, page 3 | Not applicable | This is not scientific peer reviewed literature. This is a private citizen representing a private organization comment letter to a district ranger. |
| Brittingham, M.C.; Temple, S.A. 1983. Have cowbirds caused forest songbirds to decline? BioScience. 33(1): 31-35. http://bioscience.oxfordjournals.org/content/33/1/31.full.pdf | SC-02, Opposing Views Attachment #4, page 1 | Limited applicability | Study shows correlation between brood parasitism rates by cowbirds and forest fragmentation and openings in eastern deciduous forests. Although cowbirds exist in eastern Oregon and therefore brood parasitism occurs, it is not anticipated that actions proposed in the project planning area would fragment the forest or create large enough openings that brood parasitism would increase. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Calvert, J. 2002. A healthy forest needs bugs. California forest stewardship program. http://ceres.ca.gov/foreststeward/html/bugs.html | SC-02, Opposing Views Attachment #5, page 6 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Canfor Corporation. 2007. Forest protection – insects. http://www.canfor.com/treeschool/library/files/insects.asp | SC-02, Opposing Views Attachment #5, page 8 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Gerein, K. 2009. Notorious pine beetle may be misunderstood. The Edmonton Journal. March 21. http://www.canada.com/story.html?id=3b60b9d3-ba2a-41f6-8d68-b87b14c9e6da | SC-02, Opposing Views Attachment #5, page 9 | Not applicable | This is not scientific peer reviewed literature. |
| Hodgman, T.P.; Harrison, D.J.; Katnik, D.D.; Elowe, K.D. 1994. Survival in an intensively trapped marten population in Maine. The Journal of Wildlife Management. 58(4): 593-600. http://www.jstor.org/stable/3809671?seq=1#page_scan_tab_contents | SC-02, Opposing Views Attachment #4, page 34 | Limited applicability | Article explains survival of male and female martens in a heavily trapped population and causes of mortality. The discussion presented about trapping having the potential to cause marten populations to decline in landscapes with high road access is consistent with the analysis. However, marten trapping regulations and harvest limits are determined by the Oregon Department of Fish and Wildlife and is therefore beyond the scope of this analysis. |
| Jalkotzy, M.G.; Ross, P.I.; Nasserden, M.D. 1997. The effects of linear developments on wildlife: a review of selected scientific literature. Calgary, CA: Arc Wildlife Services Ltd: 115 p. http://www.ceaa.gc.ca/050/documents/p59540/83236E.pdf | SC-02, Opposing Views Attachment #1, page 18 | Limited applicability | A summary of scientific literature compiled for species and habitats not applicable to the Malheur National Forest. However, discussions of road density, road construction and connectivity are consistent with project planning. |
| Marks, R. 2006. Importance of disturbance in wildlife habitat management. Fish and wildlife habitat management leaflet number 37. USDA Natural Resources Conservation Service. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_054074.pdf | SC-02, Opposing Views Attachment #8, page 8 | Applicable | Findings are consistent with components of the purpose and need and the design of proposed treatments. |
| McLellan, B.N. 1989. Relationships between human industrial activity and grizzly bears. In: Bears: their biology and management, Vol. 8. International Conference on Bear Research and Management, Victoria, BC: 57-64. http://www.bearbiology.com/fileadmin/tpl/Downloads/URSUS/Vol_8/McClellan_8.pdf | SC-02, Opposing Views Attachment #5, page 14 | Not applicable | Paper discusses impacts specific to species that are not of concern on the Malheur National Forest. Discussion regarding impacts of roads on grizzlies is consistent with analysis of the impacts that roads have on other wildlife species on the Forest. |
| Simard, J.R.; Fryxell, J.M. 2003. Effects of selective logging on terrestrial small mammals and arthropods. | SC-02, Opposing Views Attachment #5, page 14 | Not applicable | Study is focused on seed from deciduous hardwoods in Ontario. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Canadian Journal of Zoology. 81(8): 1318-1326. http://www.nrcresearchpress.com/doi/abs/10.1139/z03-129#.VT_UlJgcSic | | | |
| Smith, J.K. 2000. Wildland fire in ecosystems: effects of fire on fauna. Gen. Tech. Rep. RMRS-GTR-42-volume 1. USDA Forest Service, Rocky Mountain Research Station. http://www.fs.fed.us/rm/pubs/rmrs_gtr042_1.pdf | SC-02, Opposing Views Attachment #8, page 11 | Considered | This General Technical Report is considered for project planning and effects analysis, and is cited as such. |
| Spies, T. Northwest Forest Plan monitoring synthesis report. http://web.archive.org/web/20070808101639/http://www.reo.gov/monitoring/10yr-report/documents/synthesis-reports/index.html | SC-26, page 11 | Not applicable | The Northwest Forest Plan did not amend the Malheur Forest Plan, and covers different forest types than are found in the Magone project planning area. |
| Wisdom, M.J.; Holthausen, R.S.; Wales, B.C. [et al.]. 2000. Source habitats for terrestrial vertebrates of focus in the Interior Columbia Basin: broad-scale trends and management implications volume 2a – group level results. Gen. Tech. Rep. PNW-GTR-485. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. http://www.fs.fed.us/pnw/pubs/gtr485/ | SC-02, Opposing Views Attachment #4, page 35 | Considered | The Wisdom et al. 2000 publication is cited throughout the Wildlife Specialist Report. In context of road densities, the current road density in the project planning area resulting from past activities makes up the existing condition. The proposed action would ultimately decrease open road densities in the project planning area and the effects of road densities are analyzed in the Magone DEIS and Wildlife Specialist Report. |
| Woodford, R. 2003. Regeneration following fire creates fertile habitat for wildlife. Alaska Fish and Wildlife News. August. http://www.adfg.alaska.gov/index.cfm?adfg=wildlifenews.view_article&articles_id=60 | SC-02, Opposing Views Attachment #8, page 13 | Not applicable | This is not scientific peer-reviewed literature. This is a news article with scientific opinions. |
| **Snags** | | | |
| Bartels, R.; Dell, J.D.; Knight, R.L.; Schaefer, G. 1985. Dead and down woody material. In: Brown, E.R., tech. ed. Management of wildlife and fish habitats in forests of western Oregon and Washington. Part 1—chapter narratives. Publ. R6-F&WL-192-1985. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Region: 171-186. | SC-02, Opposing Views Attachment #14, page 1 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Byron, E. 2009. Wuerthner to speak to forest ecology and value of dead trees. Independent Record. Helena, Montana. November 17. http://helenair.com/news/local/wuerthner-to-speak-on-forest-ecology-and-value-of-dead/article_7cac58d2-d339- | SC-02, Opposing Views Attachment #14, page 2 | Not applicable | This is not scientific peer reviewed literature. This is an article in a newspaper. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| 11de-abfc-001cc4c002e0.html | | | |
| Franklin, J.F., D. Lindenmayer, J.A. MacMahon, A. McKee, J. Magnuson, D.A. Perry, R. Waide, and D. Foster. 2000. Threads of continuity. Conservation Biology in Practice. 1: 9-16. http://conservationmagazine.org/2000/07/threads-of-continuity/ | SC-26, page 12 | Limited applicability; consistent with analysis | Article is popular article written by scientists, but not peer reviewed. It discusses the importance of biological legacies following disturbance events and their importance in secondary succession of the disturbed landscape. It is consistent with analysis in that the proposed silviculture prescriptions better mimic historic fire disturbances than clearcutting. Further, project was designed through an interdisciplinary process so that legacy features would remain intact and present so as to not create viability concerns to wildlife species. |
| Hagar, J. 2007. Assessment and management of dead-wood habitat. U.S. Geological Survey Administrative Report 2007-1054. 32 p. http://pubs.usgs.gov/of/2007/1054/pdf/ofr20071054.pdf | SC-26, page 13 | Limited applicability; consistent with analysis | Publication discusses current and future management of dead-wood habitat on Bureau of Land Management managed lands in Oregon and determines that DecAID is the most comprehensive tool available to inform dead-wood management. |
| Kreil, R. 1994. Bare trees. North Dakota Outdoors. March. http://www.und.nodak.edu/org/ndwild/oldtree.html | SC-02, Opposing Views Attachment #14, pages 2-3 | Not applicable | This is not scientific peer reviewed literature. This is an opinion article |
| Laudenslayer, W.F., Jr.; Shea, P.J.; Valentine, B.E. [et al.] tech. coords. 2002. Proceedings of the symposium on the ecology and management of dead wood in western forests. Gen Tech. Rep. PSW-GTR-181. USDA Forest Service, Pacific Southwest Research Station. http://www.fs.fed.us/psw/publications/documents/gtr-181/ | SC-26, page 12 | Relevant; incorporated through the use of DecAID | The information presented in this paper discusses the importance if and current paradigm for coarse woody debris; this is consistent with the analysis and project design of the Magone Project. |
| Lofroth, E. 1998. The dead wood cycle. In: Voller J.; Harrison, S., eds. Conservation biology princples for forested landscapes. Vancouver, BC: UBC Press: 185-241. http://www.for.gov.bc.ca/hre/deadwood/DTrol.htm | SC-26, page 12 | Consistent with analysis | The publication discusses the importance of dead and down wood, the dead wood cycle and dead wood functions. The action alternatives were developed through an interdisciplinary process where which dead wood components of the landscape were considered as high priority. This is reflected in the analysis presented in the Primary Cavity Excavators and Old-Growth sections of the wildlife specialist report. |
| Maser, C.; Trappe, J.M. 1984. The seen and unseen world of the fallen tree. Gen. Tech Rep. GTR-PNW-164. USDA Forest Service, Pacific Northwest Research Station. http://www.fs.fed.us/pnw/publications/pnw_gtr164/ | SC-02, Opposing Views Attachment #1, page 22 | Consistent with science used in analysis | The publication discusses the importance of dead and decaying wood on the landscape, and that removal of defective habitat would be detrimental to species diversity and considered when basing management decisions. Dead and decaying wood |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | was considered in the analysis of the Magone Project by the use of DecAID – a "decayed wood advisory tool." |
| Maser, C.R.; Anderson, G.; Cromack, K. Jr. [et al.]. 1979. Dead and down woody material, Chapter 6. In: Parker, L.J; Mowrey, R.A.; Hansen, G.M.; Bell, B.J., eds. Wildlife habitats in managed forests the Blue Mountains of Oregon and Washington. USDA Forest Service, Agriculture Handbook No. 553. | SC-02, Opposing Views Attachment #14, pages 3-4 | Consistent with science used in analysis | The chapter discusses the importance of dead and decaying wood on the landscape. Dead and decaying wood was considered in the analysis of the Magone Project by the use of DecAID – a "decayed wood advisory tool." |
| Maser, C.; Tarrant, R.F.; Trappe, J.M.; Franklin, J.F. 1988. The forest to the sea: a story of fallen trees. Gen. Tech. Rep. GTR-PNW-GTR-229. USDA Forest Service, Pacific Northwest Research Station. http://www.fs.fed.us/pnw/publications/pnw_gtr229/ | SC-02, Opposing Views Attachment #1, page 23 | Consistent with science used in analysis | Dead and decaying and down wood was considered in the analysis of the Magone Project by the use of DecAID – a "decayed wood advisory tool." |
| Miller, E.W. 1998. Savage or salvage logging? The Coastal Post. September. http://www.coastalpost.com/98/9/13.htm | SC-02, Opposing Views Attachment #14, page 3 | Not Applicable | This is not scientific peer reviewed literature. This is an opinion article in an organizational newsletter. |
| Naylor, B. 2006. Cavity trees—nature's refuge. The Ontario woodlot association newsletter. Winter/Spring Vol. 42. http://www.ontariowoodlot.com/pages_pdf_new/cavitytree_S&W.pdf | SC-02, Opposing Views Attachment #14, pages 4-5 | Not Applicable | This is not scientific peer reviewed literature. This is an organizational newsletter. |
| Parks Canada. 2009. Dead trees and good homes. http://www.pc.gc.ca/eng/docs/v-g/dpp-mpb/sec1/dpp-mpb1b.aspx | SC-02, Opposing Views Attachment #14, page 2 | Not Applicable | This is not scientific peer reviewed literature. |
| Rose, C., B. Marcot, K. Mellen, J. Ohmann, K. Waddell, D. Lindley, and B. Schreiber. 2001. Decaying wood in Pacific Northwest forests: concepts and tools for habitat management, chapter 24. In: Johnson, D.H.; O'Neil, T.A., eds. Wildlife-habitat relationships in Oregon and Washington. OSU Press: 580-623. http://web.archive.org/web/20060708035905/http://www.nwhi.org/inc/data/GISdata/docs/chapter24.pdf | SC-26, page 12 | Consistent with literature used in the analysis; incorporated through DecAID | Publication discusses the species-habitat relationships of those species dependent on decayed or decaying wood on the landscape. DecAID was used in the analysis of decayed wood habitat in the Magone project planning area, which considers this article, and silviculture prescriptions considered retaining structurally complex stands to help maintain decadent habitat in the project planning area. |
| Santiago, M.J.; Rodewald, A.D. 2004. Dead trees as resources for forest wildlife. Ohio State University extension fact sheet. http://ohioline.osu.edu/w-fact/0018.html | SC-02, Opposing Views Attachment #14, page 6 | Consistent with science used in analysis | Fact sheet discusses the value of snags, dead limbs and logs. |
| Duncan, S.1999. Dead and dying trees: essential for life in | SC-02, Opposing Views | Consistent with | Scientific article explains the importance of dead, |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| the forest. Science Findings 20. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. http://www.fs.fed.us/pnw/sciencef/scifi20.pdf | Attachment #14, page 7 | science used in analysis | decaying and defective wood/trees in the forest. |
| Stevens, V. 1997. The ecological role of coarse woody debris: and overview of the ecological importance of CWD in BC forests. Res. Br., BC Min. For., Victoria, BC: working paper 30. http://www.for.gov.bc.ca/hfd/pubs/docs/Wp/Wp30.pdf | SC-26, page 13 | Consistent with science used in analysis | The publication discusses the role and importance of coarse woody debris in BC forests. The action alternatives were developed through an interdisciplinary process where which dead wood components of the landscape and the retention thereof were considered as high priority. This is reflected in the analysis presented in the Primary Cavity Excavators and Old-Growth sections of the wildlife specialist report. |
| Thomas, J.W. 1999. Dead wood: from forester's bane to environmental boon. Keynote address at the symposium on ecology and management of deadwood in western forests, Reno Nevada. http://www.fs.fed.us/psw/publications/documents/gtr-181/003_Thomas.pdf | SC-02, Opposing Views Attachment #8, page 12 | Consistent with literature used in analysis | Addresses the history of the paradigm concerning dead and defective wood and highlights the recognition of its importance. |
| Threatened Species Conservation Act 1995. Schedule 3. [Accessed 12 December 2003]. http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=20011 | SC-02, Opposing Views Attachment #14, page 5 | Not applicable | This reference link is to a website discussing endangered species, legislations, habitat, and recovery in New South Wales, Australia. The Magone Project is located in the United States of American and is subject to the laws, regulations, and policies of the government of the United States. Species listings and habitat information for Australia are not applicable in the United States. |
| Torgersen, T.R.; Bull, E.L. 1995. Down logs as habitat for forest-dwelling ants—the primary prey of pileated woodpeckers in northeastern Oregon. Northwest Science. 69: 294–303. https://research.wsulibs.wsu.edu/xmlui/bitstream/handle/2376/1311/v69%20p294%20Torgersen%20and%20Bull.PDF?sequence=1 | SC-02, Opposing Views Attachment #1, page 2 | Considered | Paper discusses the proportion of down logs that have log-dwelling ants and their importance as habitat components to pileated woodpeckers. Down wood was analyzed for the Magone Project through the use of DecAID – a "decayed wood advisory tool." |
| **Roadless** | | | |
| Black, S.H. [et al.]. 2010. Insects and roadless forests: a scientific review of causes, consequences and management alternatives. National center for conservation science and policy, Ashland OR. http://www.xerces.org/wp-content/uploads/2010/03/insects-and-roadless- | SC-02, Opposing Views Attachment #5, page 4; SC-02, Opposing Views Attachment #17, page 6 | Not relevant | This article is about thinning to reduce possible insect infestation and that is not relevant to this project. Thinning proposed in the roadless area is in planted stands along roads within the roadless boundaries for watershed health, or where species have encroached into areas where they existed |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| forests1.pdf | | | sparsely historically. |
| Northup, J. 1999. Public wants more wilderness, less logging on Green Mountain NF. Press Release by Forest Watch, a Vermont-based environmental organization. http://www.forestwatch.org/content.php?id=10 | SC-02, Opposing Views Attachment #1, page 26 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| **Recreation/Trails** | | | |
| Chavez, D.J. 1996. Mountain biking: issues and actions for USDA Forest Service managers. Res. Pap. PSW-RP-226-Web. USDA Forest Service, Pacific Southwest Research Station. 33 p. http://www.fs.fed.us/psw/publications/documents/rp-226/ | SC-18, page 2 | Applicable to analysis | This article discusses how managers of national forests are faced with many challenges related to the growing use of mountain bikes. To determine the issues and management actions associated with this growth, USDA Forest Service managers from across the United States were surveyed. Managers from at least two national forests from every region (except Alaska) reported an annual use of trails by 10,000 or more mountain bike riders. Based on this use, managers reported concerns and impacts related to natural resources, social institutions, and social policy; and offered management actions for resolving these problems.<br>Commenter brought up this article in reference to that many resource concerns can be minimized and mitigated through project design criteria; see Appendix C – Project Design Criteria. |
| Sprung, G. 2007. Natural resource impacts of mountain biking: a summary of scientific studies that compare mountain biking to other forms of trail travel. International Mountain Bike Association. https://www.imba.com/resources/research/trail-science/natural-resource-impacts-mountain-biking | SC-17, page 1 | Applicable to analysis | This article is a summary of various scientific studies on the effects of mountain bike trails and use versus other trail use types. The article is published by a mountain biking advocacy group. It is not scientific peer-reviewed literature, however, summarizes and lists multiple scientific peer-reviewed references.<br>The overall conclusion of this article's review of scientific literature is that while mountain biking does impact the environment, the studies reviewed by the author found that mountain biking causes no more damage to trails then other forms of recreation like hiking. |
| **Climate Change** | | | |
| Schoennagel, T.; Veblen, T.T.; Rommie, W.H. 2004. The interaction of fire, fuels, and climate across Rocky Mountain forests. Bioscience. 54(7): 661-676. | SC-02, Opposing Views Attachment #3, page 21 | Provides background information; | This paper discusses the influence of fuels and climate on the severity of wildfires across the Rocky Mountains and seeks to understand the potential |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| http://www.colorado.edu/geography/courses/geog_4371_f05/readings/schoenagel_et_al_2004.pdf | | supports analysis | effectiveness of fuel reduction across a range of major forest types. Overall, their analysis reveals that fire regimes, climate, fuel type and abundance, and stand structure vary significantly and require different approaches to restoration and wildfire management. With fire suppression, the author's note, young fire-intolerant trees can establish and these denser stands provide "ladder" fuels that carry fire into continuous canopy fuels, promoting large, catastrophic fires. The author's assert that this system presents a strong case for thinning to reduce the fire hazard and to restore historical stand structure.<br>In the Magone project planning area it would be both ecologically appropriate and operationally possible to restore a low-severity fire regime through thinning and prescribed burning. Historically, fire was the dominant natural process in the Blue Mountain ecoregion. It will occur eventually as high- or low-severity fire, depending on the condition of the forest, and the environmental conditions at the time of the fire. Low-severity fires produce multiple benefits to the ecosystem, produce less smoke than high severity fire in forested ecosystems, and retain more carbon. |
| Westerling, A. 2006. Does global warming increase forest fires? NPR, Talk of the Nation, July 7.<br>http://www.npr.org/templates/story/story.php?storyId=5541423 | SC-02, Opposing Views Attachment #3, page 24 | Supports the purpose and need of this project | National Public Radio interview with A. Westerling regarding research published in the journal *Science* saying that global warming may be causing more intense wildfires in the western United States. The researchers found that increases in large wildfire activity in the western United States over the past 25 years is "strongly associated with increased spring and summer temperatures and an earlier spring snowmelt." As a result, the forest dries out more than usual, and it is dry for longer so there are more opportunities for a fire to ignite and spread. Westerling proposed mitigation efforts that better manage vegetation (via thinning), and ecological restoration of forests that have been changed by past management efforts (fire suppression): "In some places forests were quite |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
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| | | | open and they became much thicker over time. And that has certainly increased the severity of fires, and perhaps also the frequency of fires in some locations." This document is not scientific, peer-reviewed literature.<br>Historically, fire was the dominant natural process in the Blue Mountain ecoregion. It will occur eventually as high- or low-severity fire, depending on the condition of the forest, and the environmental conditions at the time of the fire. This project would modify the fuels complex in the planning area by reducing tree densities and removing shade tolerant, fire susceptible trees that contribute to high severity fires. |
| Wuerthner, G. 2007. The climate factor— forest thinning won't deter the coming large fires. Eugene Weekly. December 6.<br>http://www.eugeneweekly.com/2007/12/06/views3.html | SC-02, Opposing Views Attachment #3, page 25 | Not applicable | This opinion piece from the Eugene Daily discusses climate and fuels treatment contends that thinning may work to slow or reduce tree mortality under low and moderate fire conditions; however, thinning does not stop the largest blazes that occur under severe fire conditions. The author suggests that thinning can increase wildfire spread and severity by opening the forest to greater wind and solar penetration, drying fuels faster than in unlogged forests. This document is not scientific, peer-reviewed literature.<br>The Magone project proposes fuel treatments to restore a low-severity fire regime to the planning area that would lessen the effects of wildfire. Historically, fire was the dominant natural process in the Blue Mountain ecoregion. It will occur eventually as high- or low-severity fire, depending on the condition of the forest, and the environmental conditions at the time of the fire. Low-severity fires produce multiple benefits to the ecosystem, produce less smoke than high severity fire in forested ecosystems, and retain more carbon. |
| **NEPA** | | | |
| USDA Forest Service. 2006. Bald Angel Vegetation Management Project Environmental Assessment. USDA Forest Service, Wallowa-Whitman National Forest, La | SC-02, Opposing Views Attachment #3, page 23 | Not applicable | This document is an Environmental Assessment produced by another Forest Service unit in 2006. The analysis contained in this document applies to |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Grande Ranger District. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/6608/Wallowa_Whitman_Bald_Angel_Vegetation_Management_EA.pdf?sequence=1 | | | the Bald Angel Project and its corresponding planning area. |
| **Socioeconomic** | | | |
| Esteve, H. 2013. Bicycling contributes $400 million to Oregon tourism, new survey says. The Oregonian. Published May 8. http://www.oregonlive.com/business/index.ssf/2013/05/bicycling_contributes_400_mill.html | SC-17, page 1 | Limited applicability | This is not scientific peer reviewed literature. This is a news article in the Oregonian newspaper discussing the tourism impact of recreational bicycling in Oregon. The article cites a survey from the Travel Oregon, the official State of Oregon tourism agency. |
| Noble, I.R.; Dirzo, R. 1997. Forests as human-dominated ecosystems. Science. 277(5325): 522-525. http://www.sciencemag.org/content/277/5325/522.abstract?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=logging&searchid=1136659907310_5043&FIRSTINDEX=0&journalcode=sci | SC-02, Opposing Views Attachment #1, page 25 | Limited applicability | This article discusses the change in and loss of forested acres on a world-wide scale, different types of forest management practices, and the use of sustainable forestry.<br>The DEIS analyzes and discloses direct, indirect, cumulative, adverse, and beneficial effects of the proposed action on a variety of resources, including diversity. This project is consistent with current and applicable law, regulation, and policy. |
| Rudzitis, G. 1999. Amenities increasingly draw people to the rural west. Rural Development Perspectives. 14(2): 9-13. | SC-02, Opposing Views Attachment #1, page 31 | Not relevant to this project | The paper discusses findings from survey research that assess why people move from counties throughout the American west and specifically the northwest. With respect to federal land management, most surveyed favored protection strategies, with an emphasis on good stewardship; and commodity production allowed on federals lands that are not degraded.<br>The research does not provide site-specific analysis pertinent to the Magone Project. This project is consistent with current law, regulation, and policy. |
| Vincent, J.W.; Hagen, D.A; Welle, P.G.; Swanser, K. 1995. Passive-use values of public forestlands: a survey of the literature. A study conducted on behalf of the U.S. Forest Service. http://www.icbemp.gov/science/vincent.pdf | SC-02, Opposing Views Attachment #1, page 37 | Not relevant to this project | The article cited is an opinion paper offering review and comment regarding the state of economic research pertaining to the nonuse or passive values of forests. The article addresses the implication of the many studies relating to the management of public forestlands in the Columbia River Basin in particular and forests of the Pacific Northwest. This article illustrates that timber harvesting, for example, produces economic goods |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| | | | primarily in the form of wood products. On the other hand, forestlands are managed for recreation opportunities, watershed protection, and biodiversity, and these goods provide values, which can be characterized as passive-use values. The article identifies valuation methods for estimating the economic value of environmental goods. The article reviews four studies that attempt to estimate the total value derived from both use and passive-use values and identifies the strengths and weaknesses of each study. The article concludes that economic research should not ignore passive use values and by ignoring these values future studies may seriously understate the benefits associated with the preservation of wilderness areas, wildlife, old forests, and other goods associated with preservation. In the absence of this information, the only conclusions that one is able to reach would be very general in nature.<br>This article is not relevant to the Magone Project because it simply offers opinion regarding the development of future economic studies and that the methodological estimations used in future studies should not ignore the importance of passive-use values. |
| **Miscellaneous** | | | |
| Board on Agriculture. 1998. Forested landscapes in perspective: prospects and opportunities for sustainable management of America's nonfederal forests. The National Academies Press, Washington, D.C.<br>http://books.nap.edu/openbook.php?record_id=5492&page=205 | SC-02, Opposing Views Attachment #5, page 5 | Not applicable | As the title states, this book pertains to management of nonfederal forests. |
| Collins, S. 2003. Forest Service Associate Chief speech: Changing public land uses—a tale of two debates. Outdoor Writers Association of America, 76th Annual Conference. Columbia, MO.<br>http://www.fs.fed.us/speeches/changing-public-land-uses-tale-two-debates | SC-02, page 4 | Not applicable | This is a speech. It is not specific to any laws, regulations, or policies that would be pertinent to the Magone Project analysis. |
| Collins, S. 2005. Forest Service Associate Chief speech: The future of partnering with the Forest Service. Meeting of the National Association of Conservation Districts. | SC-02, page 4 | Not applicable | This is a speech. It is not specific to any laws, regulations, or policies that would be pertinent to the Magone Project analysis. |

| Literature cited by commenters | Source | How considered? | Forest Service rationale/comments |
|---|---|---|---|
| Atlanta, GA. http://www.fs.fed.us/spf/coop/library/NACDspeech.pdf | | | |
| Leopold, A. 1949. A Sand County almanac: and sketches here and there. Oxford University Press. | SC-02, Opposing Views Attachment #1, page 5 | Consistent with analysis | A collection of essays that advocate Leopold's idea of a "land ethic," or a responsible relationship existing between people and the land they inhabit. Leopold viewed forestry as fundamentally different from agronomy because it employs natural species, and manages a natural environment rather than creating an artificial one. The author refers to a whole series of secondary forest functions: wildlife, recreation, watersheds, and wilderness areas. |
| Lowbagger.org. 2006. Conservation groups look to hold Forest Service accountable for Middle East Fork logging plan. April 25. http://www.lowbagger.org/mideast.html | SC-02, Opposing Views Attachment #1, page 54 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Nappier, S. 2002. Lost in the forest: how the Forest Service's misdirection, mismanagement, and mischief squanders your tax dollars. Taxpayers for Common Sense. http://www.ourforests.org/fact/lostintheforest.pdf | SC-02, Opposing Views Attachment #1, page 25 | Unable to locate reference | The website link provided does not work. Unable to locate reference. |
| Noss, R.F.; Cooperrider, A. 1994. Saving nature's legacy: protecting and restoring biodiversity. Island Press. | SC-02, Opposing Views Attachment #4, page 33 | | Book that discusses biodiversity; conservation strategies; selecting and designing reserve networks; managing forests, rangelands, and aquatic ecosystems; and monitoring. The commenter specifically references this source in terms of habitat fragmentation for wildlife populations and species.<br>The Magone Project includes road closures and decommissioning which would reduce habitat fragmentation for wildlife species and includes the designation of wildlife corridors which would maintain connectivity and reduce fragmentation of late and old structure and dedicated old growth stands. The Wildlife analysis acknowledges that trail construction could increase fragmentation of old growth habitat. |
| University of California, SNEP science team and special consultants. 1996. Sierra Nevada Ecosystem Project: final report to Congress. Volume 1, chapter 4 – Fire and Fuels. http://ceres.ca.gov/snep/pubs/web/PDF/v1_ch04.pdf | SC-02, Opposing Views Attachment #1, page 36; SC-02, Opposing Views Attachment #3, page 23 | Not applicable | Book describes the status of the late-successional forests, key watersheds, and significant natural areas on federal lands in the Sierra Nevada ecoregion. The Magone project planning area is not located in this region of the country. |